

**ANNUAL REPORT OF THE
BUREAU OF HEALTH
for the PHILIPPINE
ISLANDS**

FOR THE

**FISCAL YEAR ENDED
JUNE 30, 1911**

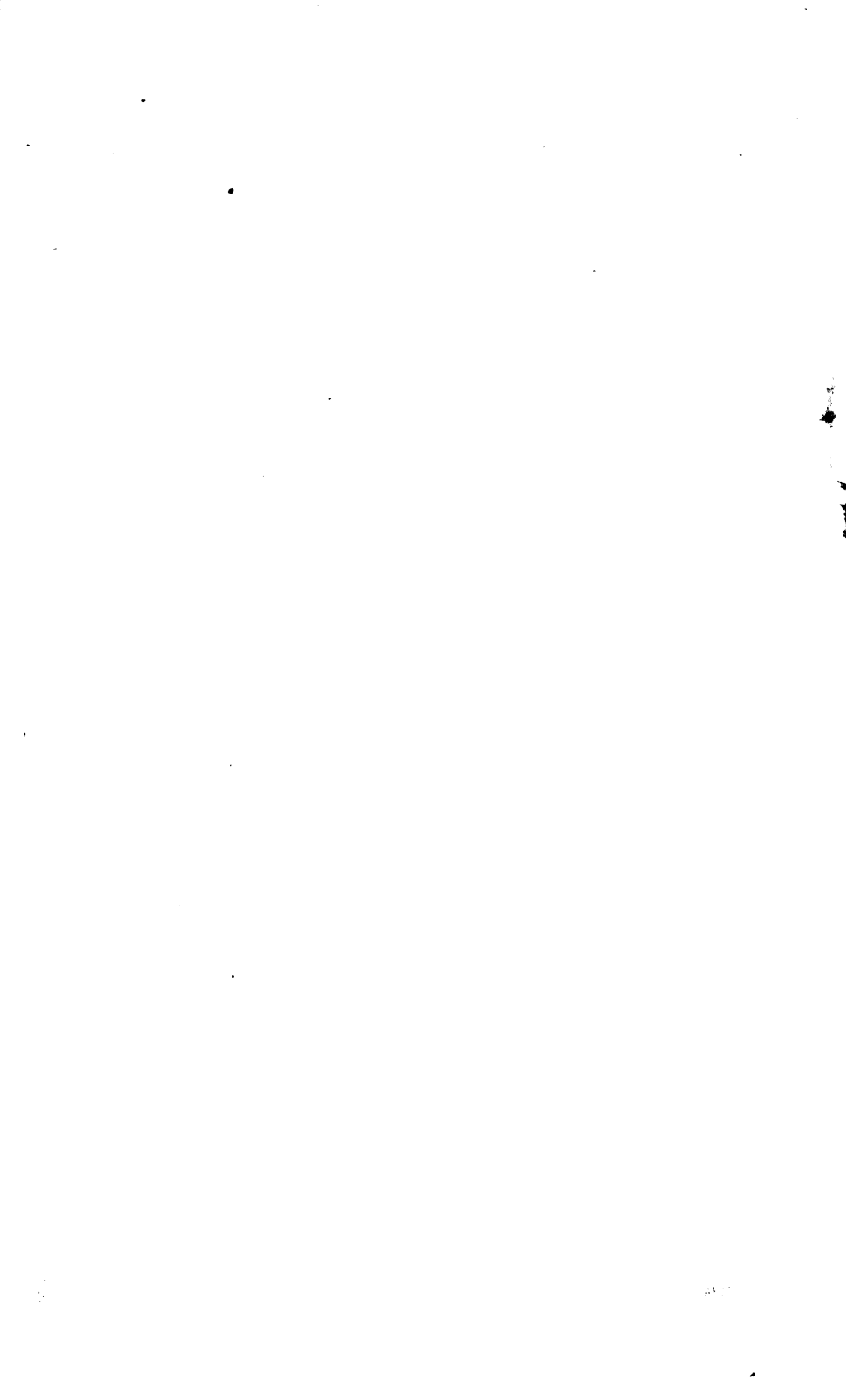
CARROLL FOX

ACTING DIRECTOR OF HEALTH

Passed Assistant Surgeon

United States Public Health and Marine-Hospital Service

**MANILA
BUREAU OF PRINTING
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LIST OF OFFICERS AND EMPLOYEES OF THE BUREAU OF HEALTH.

VICTOR G. HEISER, *Director of Health* (on leave).¹

CARROLL FOX, *Assistant Director of Health, Acting Director*.²

ROBERT E. L. NEWBERNE, *medical inspector, Acting Assistant Director of Health*.

OFFICE PERSONNEL.

MYRON H. CHANDLER, *Chief, Clerical Division*.

GEORGE H. GUERDRUM, *Chief, Sanitary Engineering Division*.

MANUEL GOMEZ MARTINEZ, *Chief, Statistical Division*.

BERTRAND D. BURNHAM, *Chief, Property Division*.

Clerks.—Ora E. Lautzenhaiser, Michael J. Walsh, Juan Austen, Maurice Dunlap, Vernon W. Goff, Mary E. Stevenson, Mamerto Tiano, Mary F. Dee, Shirley E. Gray, Percy E. Rice, Anita P. Fischer, Eugenio Viana, Policarpo Manas, Juan Barredo, Cirilo Fama, Urbano Serrano, Emilio Guerra; Tomas Manajan, Sergia Cipriano, Agapito C. Paulino, Carlos C. Hernandez, Manuel E. Sabater, Lucio D. Torralba, Mateo Victorino, Felipe Duban, Miguel Tumbagahan, Teodosio Buenaventura, Epitasio Cinco, Marcos L. Enriquez, Roman Laureano, Hobart M. Rouzee, Jovito Santiago, Sofronio Sarmiento, Juana Magcauas.

Junior draftsmen.—Emilio Lintag, Valentin Cueto.

Messengers.—Benigno Guarin, Benito Alvarez, Eugenio Castillo, Andres de la Cruz, Candido Lunar, Sisenando Martin, Santiago Masanga, Pedro Mejia, Alfredo Moya, Eustaquio Villacorte, Juan J. de Marcalda, Lorenzo Perlado.

Medical Inspectors.—Benjamin L. Burdette, Alfred C. Garton, Vicente de Jesus, Zach M. Laughlin, Daniel M. Molloy, Ross S. Rissler, Salvador V. del Rosario, John E. Snodgrass, George B. Angle, Burtis W. Green, Miriam E. Griffin, Louis Schapiro.

Junior Medical Inspectors.—José P. Bantug, Andrés Bautista, Manuel B. Foronda, Marcellino M. Gallardo, Arturo Garcia, Pacifico R. Panlilio, Carmelo M. Reyes, Olivia Salamanca, Gervasio Santos, Mariano Tolentino.

District Health Officers.—Arlington Pond, Walter K. Beatty, Gilbert I. Cullen, Thomas E. Moss, J. R. Hurley (*quarantine officer*),³ José Mascuñana, Manuel Llora, Rafael Villafraña, José Losada, Andrés Catanjal, Florentino Ampil, Luis Caballero, Antonio Fernando, Donato Montinola, Buenaventura Toribio, Francisco Xavier, Francisco Lopez Lubelza.

Chiefs of Hospital Divisions.—Frank W. Vincent, Bagulo Hospital Division; Paul Clements, Cullion Leper Colony Division; James W. Smith, Prison Sanitation Division; Almon P. Goff, San Lazaro Hospital Division.

Superintendents of Hospitals.—Newton C. Comfort, Acting, Philippine General Hospital; Thompson L. Lewis, San Lazaro Hospital; Harry E. Smith, Bagulo Hospital.

Chaplains Cullion Leper Colony.—Father Raymundo Peruga, Father José Tarragó.

Anesthetist.—Emma J. Ochsner.

Supervising Nurse.—Margaret M. Wheeler.

Chief Nurses.—Elsie P. McCloskey (Philippine General Hospital, superintendent, Philippine Training School for Nurses), Anna Hell (Bagulo Hospital), Lola A. Tillotson, (San Lazaro Hospital).

Municipal Physicians.—Juan B. Cabarrús, Francisco Castañeda, Vicente Cavanna, Proceso Gabriel, Florentino Herrera, Valeriano Pantoja, Canuto Reyes, Tee Han Kee.

¹ Passed Asst. Surgeon, U. S. P. H. & M. H. S., Chief Quarantine Officer.

² Passed Asst. Surgeon, U. S. P. H. & M. H. S.

³ Assistant Surgeon, U. S. P. H. & M. H. S.

Physicians.—Thomas B. Lude, Ellodoro Mercado, Gabino Vinluan, Gabriel Intengan, Pacifico Laygo, Vicente E. Manapat, Angel Mayuga, Vicente Rivera Sayo.

Pharmacists and Practicantes.—Elijah M. Saleeby, Cayetano Olba, José Cabrera, Felix Cajulis, Gil Robles, Juan Benitez, Marcelo Buhay, Doroteo Mendosa, Vicente M. Roxas, Valentin Gonzales.

Nurses.—Edith Friedline (*night superintendent*), Nellie A. Strawn (*operating*), L. Marguerite Cowan (*dietist*), Amanda M. Little, Katherine E. Taulbee, Florence H. Shultz, Pearlitta Clark, Hansine K. Solbeck, Florence E. Besley, Carrie M. Carn, Nellie S. Hand, Ruth Knierim, Margaret McIntosh, Margaret A. O'Brien, Mary C. Simpson, Elisabeth D. Thomas, Nellie E. Brandt, Alice L. Bruton, Gertrude Dunkle-Boutwell, Georgette C. Genin, Augusta C. Hardacre, Mary E. Kirkpatrick, Angeline B. Maynard, Lota M. Smith, Ramona Cabrera, Hermenegilda Flores, Baldomera García, Modesta Jamlas, Apolonia Salvador.

Housekeepers.—Elinor D. Rouzee, Mary I. Wardell.

Hospital Attendants.—James L. Booth, Thomas L. Carter, Charles Hendel, Joseph H. Hodnett, William P. Hunnicutt, Robert E. McDonald, Joseph Sedlmayr, William J. Stagen, Jack M. Stevens, Albert R. Duncan, Joseph D. Evans, Alfred M. Lewey (*X-ray*), Louis J. Martin, John W. Philbrook.

Steward and Assistant Steward, Cullion Leper Colony.—David L. Black, Barrington K. West.

Municipal Midwives.—Basilia Garcia, Basilia Lois, Mamerta Mendez, Benita Miguel, Benita Miranda, Juliana de los Santos, Candelaria Valera.

Disinfectors.—John F. Renner, Mariano Dueñas, Filemon Gana.

Sanitary Inspectors.—Charles F. Brantigan, Warren G. Hogle, Alfred L. Covey, Oliver R. Dexter, Harry Percy, Oscar W. Searcy, George R. Shilling, Jesse E. Kennard, Henry C. Allen, Carl G. F. Bergman, Lee Mahan, William E. Park, Lewis L. Barron, John F. Haas, Orlan Harris, John F. Hayner, George F. Goodrich.

Assistant Sanitary Inspectors.—Teófilo Alvarez, Dionisio Buensuceso, Alfonso Cortey, Gabino de Jesus, Marcelo Natividad, Felix Tago, Lorenzo Aveclla, Bonifacio R. Avellana, Eugenio Blanco, Pedro Enriquez, Wenceslao L. Fermin, Enrique Fernandez, Victorio Gonzales, Sotero de Jesus, Justo Lopez, Vicente Mallari, Joaquin V. Molina, Hugo Santa Ana, Esteban Aggubao, Pedro E. Alas, Antonino Aranjuez, Cipriano Atienza, Lorenzo Barbelto, Rafael Boté, José Caballero, Carlos M. Catalan, Eduardo C. Cavas, Manuel Crespo, Braulio de la Cruz, Juan Fernandez, Doroteo Frusen, Brígido Fulgencio, Angel S. Gatmaitan, Vicente Gonzales, Lupo Guinto, Norberto Javier, Miguel Lacson, Bernabe Laxamana, Esteban A. Laxam, Ramon Leaño, Felipe de Leon, Fortunato de Leon, Simplicio Leyson, Meliton Lorenzana, José Maglaque, Anselmo Magliente, Pedro Manganaan, Andrés B. Marquez, Eusebio Martinez, Martin Medina, José Mercado, Espiridion de la Merced, Pascual Montealegre, Victor Oliveros, Canuto Pagsanhan, Estanislao Paras, Gerónimo Perez, Felix Salazar, Felino Samonte, Alejandro Sanchez, Felipe San Miguel, Albino Saracho, Estanislao Somera, Bernardo Sunga, Rosalino Tamayo, Nicasio Tanllon, Carmelo Tantoco, José Tenorio, Silverio Trinidad, Domingo Urbe, Ruperto Velasquez, Fermin Yadan, Silvestre Zabala, Domingo Zamora, Rafael Zaragoza, Mariano Zarraga, José Cargado, Alberto de la Cruz, Vicente de la Cruz, Lorenzo Escueta, Simeon Gabuten, Antonio Jacjoco, José Gervasio, Balister Labalia, Severo Mariano, Savador Martinez, Pedro de la Merced, Ciríaco Obien, Antonio Palafox, Manuel Ramos, Tirso Reyes, Laureano de la Rosa, Joaquin Sison, Pedro Tantoco, Pablo Tiangco, Simeon Tiangco, Quirino Valensuela, Francisco Villanueva.

N. B.—This list does not include Sisters of Charity, foremen, subforemen, carpenters, overseers, helpers and servants in hospitals, laborers, and other unskilled employees and laborers, numbering about 500 persons.

ANNUAL REPORT OF THE BUREAU OF HEALTH.

DEPARTMENT OF THE INTERIOR,
BUREAU OF HEALTH FOR THE PHILIPPINE ISLANDS,

Manila, August 1, 1911.

SIR: I have the honor to submit the twelfth annual report of the Bureau of Health for the Philippine Islands, covering the period from July 1, 1910, to June 30, 1911.

The year has been one of the most successful in the history of the Bureau. The state of the public health at the end of the year is more satisfactory than at any time during the past ten years, which makes it possible to commence the new year under favorable auspices. The energy and resources of the Bureau which heretofore have been necessarily spent in combating dangerous communicable diseases may now be directed toward the improvement of general and special conditions.

While there were some cases of cholera in two or three provinces, the disease did not assume epidemic proportions. Plague has raged in the countries to the north, but with the exception of one case from Amoy which died in quarantine at Mariveles, the disease has not been introduced in the Philippines.

The old Philippines Civil Hospital, an institution that did a great deal of good during its existence and which must ever figure in the early history of American occupation, was officially closed September 1, 1910, and its patients transferred to the new Philippine General Hospital. The completion and occupation of this magnificent institution marks an epoch in the history of medicine in the Far East.

ABSENCE OF THE DIRECTOR.

Dr. Victor G. Heiser, the Director of Health, left Manila March 1, 1911, on an extended leave of absence, to be devoted to the study of health measures and sanitary science in other countries. He went to Europe by way of the islands of the South Pacific and Australia. After visiting the principal cities of Europe and studying their health conditions and attending the Mohonk Conference, his itinerary takes him to Panama, Cuba, Jamaica and the principal cities of the United States for the purpose of investigating their sanitary methods. The knowledge thus gained will be utilized for the betterment of sanitary conditions in the Philippine Islands.

BIRTH RATE.

The number of births reported in Manila during the year was 9,180, giving a rate of 39.16 per thousand in a population of 234,409. The return of births must be regarded as incomplete. With all the methods that have been adopted, the number reported still falls far short of the number of children born.

By nationalities the births in Manila were as follows:

Filipinos	8,957	Americans	124
Spaniards	36	All others	63

The Chinese population is made up almost entirely of adult males many of whom are intermarried with Filipinos, hence their children are usually reported as Filipinos.

Conditions are becoming more settled every year and American officials and employees of the Government and American business men are more and more establishing homes which accounts for the increase in birth rate among this class.

The failure to have all the births registered is not chargeable to the Bureau of Health but to the people themselves. The birth of a child among the poorer classes is too common an event to excite in its parents a realization of the requirements of the Revised Ordinances, and unless some sanitary inspector accidentally discovers that the population has increased the fact may not be known.

DEATH RATE.

The number of deaths in Manila for the year was 8,279, including 491 transients, which gives a rate of 33.22 per thousand based upon the permanent population. More detailed information can be found in the statistical tables. The provincial rate is estimated at about 29 per thousand.

DEATHS WITHOUT MEDICAL ATTENDANCE.

Of the 8,279 deaths in Manila for the year, 3,779 were without medical attendance. In the earlier years of American occupation the proportion of such deaths was about 50 per cent. The free dispensary medical service, the free obstetrical service, and municipal physicians' service have played an important part in the improvement of late years.

The conditions in respect to medical practice among the poor classes are still unsatisfactory, and the only remedy is to secure the confidence of the people and disabuse their minds of the present doubt and distrust and to more widely disseminate information as to where medical and obstetrical service may be had free of charge to the poor, and by such methods and measures to educate the masses to a better appreciation of the possibilities of modern medical science. It may be said that at the present time there are whole provinces without a single physi-

cian unless it be the representative of the Bureau of Health. In such provinces one finds men, known as mediquillos, having a smattering of the subject of medicine. As long as such individuals confine themselves to the use of simple remedies they probably do more good than harm and it is hardly fair to prohibit this practice unless the Government is in a position to give the inhabitants something better.

DEATHS AMONG TRANSIENTS.

There were 491 deaths of transients in Manila during the year. As this class does not figure in the city census, these deaths are not counted in computing the annual death rate per thousand.

Formerly nearly all transient deaths were among adults but since the free clinics of the Bureau of Health have become better known, many children are brought into the city for treatment. The hospitals of the city receive many patients from the provinces, some being brought in the last stages of their ailments, which accounts for a considerable portion of the deaths among transients.

The most important causes of deaths among transients were:

Tuberculosis of the lungs	130	Pneumonia	15
Other epidemic diseases (beriberi)	35	Organic diseases of the heart	12
Convulsions (under 5 years)	19	Dysentery	11
Asiatic cholera	16	Bronchitis, acute	11
Chronic bronchitis	15	Congenital debility	10

OBSCURER CAUSES OF DEATH.

About eighteen months ago this Office directed a series of autopsies to determine among other things the cause of the many deaths attributed to "convulsions of children," infantile beriberi, and many other causes in which the diagnosis, without autopsies, must have naturally involved more guessing than accuracy would sanction.

Several practitioners objected to the autopsies on the ground that it was a reflection on their diagnostic ability, and filed an elaborate protest with the Government, thus to some extent interfering with the investigation. To give assurance of the desire of the Bureau of Health to assist the Filipino physicians in every possible way and expecting education to make things right eventually, the following circular was issued to the medical officers of the Bureau and others concerned:

Until further notice, the practice of verifying diagnoses on death certificates by autopsies will be discontinued except when indicated by special circumstances or conditions in which case the attending physician should be notified and the reasons for such autopsy explained by him and the Medical Inspector to the family or relatives of the deceased so that it may be understood that the autopsy is for the study of disease and for the purpose of obtaining reliable statistical information, and not as a reflection on the family physicians.

Rectal specimens in doubtful cases should still be taken as heretofore, care being taken to impress on the family that such a procedure is not a reflection on the attending physician. In cases where ante-mortem specimens which are always to be preferred, have been obtained, the post-mortem specimen need not be taken.

While the Bureau of Health does not intend to waive its right to order autopsies when such are needed for the study of any special diseases, or when it is obvious that physicians are erroneously ascribing the cause of death to other diseases than the correct one, every precaution will be taken to inform the people and especially the families in which deaths occur, that the autopsies are not held as a reflection on the attending physician but as a public health measure for the benefit of the people through better knowledge of disease.

ANTE-MORTEM SPECIMENS.

In every case which could possibly be considered suspicious of cholera, ante-mortem specimens are taken and sent to the Bureau of Science for examination. The following circular will show the instructions that have been issued and are being observed throughout the Philippine Islands:

Your attention is called to the great importance of taking cultures from the stools or from the intestinal contents in cases suspicious of cholera, as it is probably these undiagnosed cases, mild or severe, which carry the infection over from one season to the other. Even cases of diarrhoea with no other symptoms may show the cholera vibrio upon examination of the stools.

For this reason you are directed to keep on hand at all times some tubes of agar which can be obtained on requisition. The surface of this agar should be spread with some of the possibly infective material from a suspicious case and sent to this Bureau immediately to be examined. The culture tube should be properly protected by cotton and packed in a bamboo container to avoid breakage. With the tube should be the necessary data.

INFANT MORTALITY.

Several years ago the Bureau of Health began a campaign of education in matters pertaining to the care of infants. A special bulletin was prepared by a committee of native physicians and distributed among the people. In this bulletin special emphasis was placed on the value of proper feeding and the danger of allowing children to eat solid food before the eruption of the temporary teeth. It was shown that mother's milk is the proper food for a young child and that the next best substitute is cow's milk. The best evidence that the health authorities have that these bulletins were widely read, even if not to advantage, is the fact that the consumption of milk in the city has increased probably 500 per cent, nearly all of the output being used as food for infants. As important as this factor is, it has had no marked effect in saving the lives of children, and the reason therefor must be apparent to all who know anything of local conditions. The trouble lies in the improper care of vessels and receptacles in which the milk is kept, the practice of adding river or estero water, and the failure to take the necessary precautions to keep the milk fresh. There is also the contamination at the time of milking to

be reckoned with. Probably 95 per cent of the milk used is carabao milk. The carabao is by nature a dirty animal, and undoubtedly contributes a full share to the sum of impurities that vitiate the milk by the time it reaches its destination, the infant's stomach.

The Sanitary Code provides that all milk dealers shall register at the Bureau of Health, and that all vessels or receptacles used by them as containers for milk shall be made of smooth, impervious material, which is capable of being thoroughly sterilized by heat or other improved means, and that such containers shall be provided with suitable covers for protection against dust or other impurities and shall be sterilized each time before use. The code also provides that all milk sold or offered for sale shall be at all times subject to examination and analysis by the Bureau of Health, and that diseased milch animals may be summarily condemned and destroyed.

The practice of adding water to milk is so firmly established that it was found necessary to make provision in the code that it shall be unlawful to bring into the city or sell or offer for sale any milk that is not fresh or wholesome or that has been watered, adulterated, reduced or changed in any way by the addition of water or other substance. Adulterated milk is defined as (a) milk containing less than 12 per cent of milk solids, including fats; (b) milk containing more than 88 per cent of water or fluids; (c) milk containing less than 3 per cent of fats; (d) milk drawn from animals within fifteen days before or after parturition; (e) milk drawn from animals fed on any substance in state of fermentation or putrefaction, or any unwholesome food; (f) milk drawn from cows in a diseased or unhealthy condition, or from cows kept in a crowded or unsuitable place; (g) milk from which any part of the cream has been removed, unless the fact is made known to the purchaser at the time of sale; (h) milk to which has been added water or any foreign substance whatever.

It is a difficult matter to enforce these regulations. Success will not come until the people themselves learn to appreciate the fact that most diseases are introduced into the system from without, and that the infecting principle is a germ against which the only protection is absolute cleanliness. This idea of disease appears to the minds of the masses of the people as too hypothetical to be worthy of belief. The native physician, in the course of time, may educate the people along these lines, but not until the needless sacrifice of thousands of babies has been made.

Samples of milk are sent to the laboratory of the Bureau of Science frequently and if the bacterial count is excessive an investigation into the methods of handling the milk is made and if subsequent examinations show the bacterial count to be high, the sale of the milk is prohibited.

AN EFFORT ON THE PART OF THE BUREAU OF HEALTH TO IMPROVE THE MILK SUPPLY OF MANILA.

The question of a pure milk supply being, in Manila, as important from a sanitary standpoint as in any other large city and so intimately associated with infant mortality, the Bureau of Health has recently issued regulations with a view towards bettering the methods of collecting and storing milk for sale.

It may be said that although most native mothers suckle their offspring, the infant mortality among the Filipinos is appalling. Malnutrition plays an important part in the production of the high mortality. Whether this malnutrition be due to impoverished milk from an underfed, anaemic mother; whether it be due to enteric troubles as a result of improper food; or whether it be due to infantile beriberi (assuming that such a condition is an entity) or due to something present or lacking in a beriberic mother's milk, the solution of the question is the same—namely, to supply a pure milk on which infants can be fed and from which they can receive benefit. The splendid work done by the "Gota de Leche" Society shows what can be accomplished by scientific feeding with a pure milk. The canned milks offer a food which is sterile and if diluted with sterile water and made so that the different ingredients are in the proper proportion serve well as a substitute for mother's milk. The majority of mothers however are apt to mix this milk in such a way that certain of the constituents are in excess of the normal amount. This is especially true of the milks preserved with sugar where the infant is very liable to get an excess of carbohydrate which it can not digest and which will cause disturbance.

However it is no doubt true that even poor mother's milk and canned milk unscientifically used would be better than much of the extremely poor, bacteria-laden fresh milk sold by the native vendors. The milking is done in a most insanitary way and from the very start the milk is highly contaminated; and as it furnishes a splendid medium for the growth of bacteria with the added favorable temperature of the tropics it takes but a short time for the organisms to multiply to many millions per cubic centimeter. Whether these particular organisms can produce diseases, or whether there must be occasionally some pathogenic organisms present in the milk to give trouble; or whether it is a toxin produced by the organisms, is not a matter to be discussed here. It is sufficient to state that in large cities of Europe and the United States during the summer months disease and death among infants is much greater than in the cold weather because the conditions are such that the milk can become overgrown with bacteria and that when such milk is sterilized or pasteurized the mortality and morbidity fall markedly. Unfortunately in this country ice is out of the reach of the small dairies or milk dealers and the next best thing is to educate them along the lines of cleanliness thus preventing as far as possible an initial con-

tamination of the milk as well as any subsequent contamination; and at the same time to compel them to avoid adulteration, as it is very common to find milk low in its necessary constituents due to watering.

An average of ten samples of carabao milk, which might be classed as good, showed 7.82 per cent of fat and 7.50 per cent of solid nonfat. Both figures are below the standard set for carabao milk. Ten samples of milk, classed as poor, gave an average of 4.33 per cent of fat and 4.15 per cent of solid nonfat. Both figures are much below the required standard. Education, with the occasional stimulus of prosecution with a fine, has recently improved the conditions to a noticeable degree. The average bacterial count of fifteen samples is 20,500,000 per cubic centimeter. This might be much greater, and the mere fact that it is not greater holds out hope that it will not be very difficult to get some improvement.

Fresh milk will be consumed more and more in the future especially since milch cows may now be brought in from Australia, and when the consumption becomes greater if bacterial purity is not maintained it might be wise to establish a central pasteurizing depot, where milk could be sterilized before being delivered to the consumers.

The following regulations for milking, handling and selling of fresh milk have been promulgated:

1. Diseased persons and diseased animals shall be excluded from milking; also the cows and caraballas two weeks before or one week after calving.

2. Never excite a milch cow or *caraballa* by hard driving, abuse or unnecessary disturbance.

3. Keep the stable thoroughly clean and remove the manure within one hour previous to milking.

4. Feed no dry, dusty feed just previous to milking.

5. Use only receptacles and utensils made of glass, porcelain or smooth surfaced metal with well fitted corks or covers for collecting, distributing or peddling of milk. Never allow metal utensils to become rusty or rough.

6. Immediately after use, clean all receptacles and utensils with soap and pure water and then immerse in boiling water for half an hour.

7. Dry all receptacles and utensils by keeping them inverted in a clean, airy and sunny place.

8. Wash your hands with soap and boiled water before milking.

9. Wash the udder and adjacent parts with soap and warm boiled water before milking.

10. Milk with your hands wet in warm boiled water and never touch the milk with your hands.

11. Throw away about a tablespoonful of the first portion of the milk.

12. Throw away all milk that has a bloody, stringy or unnatural appearance, or that becomes dirty by accident.

13. Strain the milk through a metal strainer and then keep it in a dry clean place; screened against flies, or better in a clean ice box.

14. Never add anything to the milk for sale.

15. Boiling is not necessary to purify the milk; heating to a point just below is all that is required.

REPORTABLE DISEASES.

The requirement that physicians shall report certain diseases to the Bureau of Health does not meet with the enthusiastic support from the practicing physicians that its importance merits. Cholera, smallpox, leprosy, plague, scarlet fever, and diphtheria are exceptions to the rule of negligence, since they are generally reported.

Typhoid fever is a reportable disease in Manila, yet it is one of the diseases most frequently forgotten.

The Bureau has added tuberculosis to the list of reportable diseases and is endeavoring to obtain more accurate information. For this purpose the following circular was issued to the physicians of Manila and others concerned:

1. Attention is invited to sections 157 and 158 of the Sanitary Code of Manila which read as follows:

"SEC. 157. Every physician or other person having knowledge of, or any householder, tenant, or occupant upon whose premises occurs any case of dangerous communicable disease, shall immediately notify the Bureau of Health by telephone or messenger, specifying the disease and the name and address of the person afflicted. Every physician having charge of a case of dangerous communicable disease shall within twenty-four hours give written notice to said Bureau, and shall cause the same to be isolated pending action by the Director of Health. Public hospitals, dispensaries, asylums, convents, boarding schools, infirmaries, or prisons shall provide and maintain a suitable room or rooms or place for the isolation of persons suspected of having a dangerous communicable disease.

"SEC. 158. The term 'a case of dangerous communicable disease,' for the purpose of this code, shall be held to include any person sick of or affected or attacked by any of the following-named diseases: Cholera, smallpox, chickenpox, plague, diphtheria (including membranous croup), filariasis, ship or typhus, typhoid or enteric, spotted, relapsing, yellow, or scarlet fever; measles, glanders, leprosy, actinomycosis, cerebro-spinal meningitis, and anthrax, and shall further include any other disease publicly declared by the Director of Health to be communicable and dangerous to the public health."

2. Tuberculosis is hereby declared a dangerous communicable disease and thus becomes reportable.

For some reason, typhoid fever is very rarely reported, although there have been a number of cases in Manila, and for this reason it is desired to emphasize the requirement that *typhoid fever* and *tuberculosis* be reported in the future. In the case of these two diseases, immediate notice by telephone or messenger is not necessary. All that is required is a written notice within twenty-four hours.

MUNICIPAL PHYSICIANS.

There are eight municipal physicians employed in the city of Manila to render gratuitous assistance to the poor of the city. They are getting nearer to the people every year, as special effort is being made to overcome and to dissipate the superstitions of the poorer classes.

The municipal physicians personally are men of character and education and take a deep interest in their work.

During the year there were 7,768 patients seen by municipal physicians and 31,780 prescriptions written.

At Station A, Meisic, there is a Chinese municipal physician for the care of the indigent Chinese population.

FREE OBSTETRICAL SERVICE.

At each station of the Bureau of Health in Manila there is a midwife to attend the confinement cases among the poor. At some of the stations there are two. The Philippine Medical School also conducts a free obstetrical service and sends out native trained nurses to instruct the mothers in the care of their newborn children. From time to time the professor of obstetrics in the Medical School, gives popular lectures to the women of Manila on subjects which they as mothers should know. The expansion of the free obstetric service has been very successful and it is becoming more and more popular with the masses, who heretofore have known nothing of the benefits of scientific practice in this specialty.

SIMPLE REMEDY PACKAGES.

In order to more generally distribute simple remedy packages among the people the following circular was sent to the municipalities through the district health officers:

Attention is invited to the fact that many of the municipalities throughout the Philippine Islands are not provided with any medicines whatsoever, and in this connection to state that this Bureau has prepared a small pamphlet, in English, Spanish and the principal dialects upon the use of simple remedies, and is prepared to furnish the medicines which are described therein in packages that range in price as follows:

Package No. 1	₱25.00
Package No. 2	8.00
Package No. 3	2.00

It is respectfully suggested that this matter receive consideration with the view of having at least all of the more isolated municipalities provided with packages.

Many of the municipalities have purchased these packages as will be seen from the fact that 226 packages were sold this year as against 92 last year.

In addition to this, medicines have been furnished free of charge to missionaries and other reliable people who travel in remote places, and whose business brings them in contact with the indigent sick.

Simple remedy packages are selected assortments of medicines and medical supplies for use where there are no qualified physicians and no properly equipped drug stores.

EMERGENCY DISINFECTING PACKAGES.

The following notification issued to all the district health officers in the Philippine Islands is a statement of the purpose of the Bureau to have every municipality supplied with disinfectants for the purpose of combating dangerous communicable diseases as soon as they make their appearance, thus avoiding the embarrassment and the danger of vexatious delays in securing disinfectants after the disease has manifested itself.

The appeal was in the nature of a circular addressed to the district health officers, the substance of which was as follows:

The attention of all district health officers is called to the fact that not infrequently municipalities either have no disinfectants on hand or are very inadequately supplied with the same, so that they are unable to cope with dangerous communicable diseases when they make their appearance.

For this reason the Bureau of Health has an emergency disinfecting package containing the following articles:

- 4 liters kreso
- 2 kilos potassium permanganate
- 1 disinfecting pump.

This package with only one pump will cost ₱10; with two pumps, ₱16, and can be obtained from the Bureau of Health.

It is recommended that all municipalities carry on hand at least one of these emergency disinfecting packages.

The question of ways and means of carrying out the recommendations of this circular is left to your judgment with the request that you will submit a report on the result.

There were 14 of these packages issued during the fiscal year.

SURGICAL RELIEF FOR THE POOR.

The following circular issued to the district health officers is an intimation of the extensive scale on which government charities are carried on in this country. The Honorable, the Secretary of the Interior, has authorized free transportation for indigent cases in the provinces that need hospital treatment.

The circular referred to is as follows:

You are requested to submit as nearly as practicable a list of indigent people in your district who are suffering with chronic curable surgical ailments such as tumors, clubbed hands and feet, hare lip, cleft palate, goiter, squint, hernia, incipient cancer, tuberculosis of bones and joints, obstructive blindness, and other maladies which can be remedied by operative procedure, with the object of making available for such patients as desire to accept them the facilities of the new Philippine General Hospital.

The list should give the names of the afflicted persons and the municipalities in which they reside, and so far as possible, explicit directions for finding them.

Many patients have availed themselves of the benefits of this offer and have come to the hospital for relief.

AMERICAN SANITARY INSPECTORS.

By approval of the Honorable the Secretary of the Interior a system has been put into operation for the promotion of American sanitary inspectors. Under this system inspectors after preliminary temporary appointment to determine their fitness and after passing the examination will be appointed at the rate of ₱1,800 per annum. After one year of satisfactory service they will be promoted to ₱2,000 per annum, after two years' satisfactory service to ₱2,160 per annum, and after three years' satisfactory service to ₱2,280 per annum. Promotions of those now in the service will be made immediately in accordance with their length of service.

RABIES.

A free Pasteur Institute has been established in connection with the Bureau of Science and in cases where the rabid patients can not be brought to Manila, the treatment plainly labeled for each of the twenty-five days over which it extends, is sent to the provinces to be administered by the nearest available physician.

Medical officers have been instructed to send in all dogs, alive when practicable, that are believed to be afflicted with rabies. If they can not be sent in alive they are to be killed and the brain sent in glycerine to the Bureau of Science in order that the presence of Negri bodies may be determined.

There were 54 cases treated by the Bureau of Science during the period covered by this report.

One case of human rabies was treated at the San Lazaro Hospital. The diagnosis was confirmed by the laboratory upon post-mortem examination and animal inoculation. Several cases of human rabies have been reported from the provinces upon reliable information. However, the diagnoses were not confirmed by laboratory methods.

TIENDAS.

There has been notable improvement in the sanitary conditions of tiendas during the last few years. These little stores, of which there are about three thousand in Manila, are really the local markets and are a great convenience to the people. No purchase is too small to be ignored. For the greater part they are kept by Chinese who know that a hundred centavos make a peso and pay more attention to the one which they have not than to the ninety and nine which they have safely in their possession.

The license requirements of these little stores have been gradually increased in the interest of the public health until they are not a source of danger as they were in the earlier cholera outbreaks since American occupation.

Cooked foods are protected from flies and from handling which formerly constituted a grave source of danger.

THE PAIL-CONSERVANCY SYSTEM.

Since the new sewer system has been in operation, the importance of Manila's well-managed pail-conservancy system has lessened but it is still useful in remote barrios and locations where sewer extensions have not been made and for emergency service.

Several of the smaller municipalities have adopted the system with success. No success has yet attended the proposed system of utilizing the waste for the fertilizing of mulberry trees for silkworm culture as advocated by the Director of Health in his report two years ago.

ESTEROS AND UNDRAINED LANDS.

The status of the esteros in Manila was taken up by a committee, of which the president of the Municipal Board was chairman and the superintendent of water supply and sewers secretary. Through the efforts of this committee the ownership of the esteros has been decided by an agreement between the Municipal Board and the Secretary of Commerce and Police, which concedes them to the city of Manila.

The concluding recommendations of this committee were to the effect:

1. That all lands at an elevation below 11.50 meters, city datum, (10 meters being mean low tide), are swampy and overflowed during the rainy season.

2. That if the low lands were raised to elevation 11.50 meters above the city datum, they could be drained and made habitable.

3. That there are barrios which are so insanitary as to make it unadvisable that they should continue to be occupied for residential purposes until they are drained or filled in, which embrace about 6,900,000 square meters, all of which is below the elevation 11.50 meters city datum; that the filling necessary to raise these to elevation of 11.50 meters is about 4,500,000 cubic meters; and that all low lands in the city should be filled in before any of the foreshore or beach is reclaimed.

4. That streets and alleys be cut through the congested and insanitary areas and that new sanitary areas be provided for nipa-house dwellers in places where they can be made sanitary.

CITY MARKETS.

The attention of the committee was called to the insanitary conditions existing on Tondo beach, due to the fact that various products, especially fish, were being sold on the beach. Mr. J. C. Mehan, chief of the department of sanitation and transportation, was called in by the committee in an advisory capacity, and after considerable study, the committee decided to recommend to the Municipal Board that a

market be built in the vicinity of Pretil Bridge, and that on the completion of that market no traffic in fish or any other products be allowed on the Tondo beach.

Mr. Mehan also called attention to the Sangleyes Market as being one of prime importance as many of the market products sold in the Arranque Market are brought from the country through the Cementerio del Norte, and that all these products are carried now to the Arranque Market and then back again by the consumers to the vicinity of the San Lazaro Estate, and that by the construction of the Sangleyes Market such double transit through the city and hardship to the consumers would be avoided.

On August 12, 1909, the Municipal Board informed the committee that the Board had decided to purchase land and erect a market on the Canal de la Reina, as recommended by the committee in its resolution of July 12, and that plans and estimates were being prepared for this market.

A new market building is being constructed at the corner of Calle Looban and Calle Herran, to take the place of the Herran Market, which will be abandoned. The new market building will be a reinforced-concrete structure, 229 feet long and 91 feet wide, so planned as to be capable of indefinite longitudinal extension.

The market tables are to be of concrete which will make it easy to clean them. The number of stalls will be 500 to begin with and they will be used exclusively for the sale of food products.

The Paco Estero, on which the new market is situated, is being walled and stone terraced steps are being constructed leading from the water to the market. Small boats from the surrounding country will bring produce directly to the market through the Pasig River and the Paco Estero, thus avoiding transshipment or hauling and the necessary delays which would occur.

LOW LANDS.

The improvement of low lands has always been a difficult problem owing to the expense involved in filling in to the required building level. Some progress has been made in Manila and a beginning in this direction has been made in the provinces, especially in Surigao. The value of land is increasing in nearly all the larger provincial capitals.

There is much work to be done in the future, along this line, throughout the entire Archipelago.

The belated report of the committee appointed by the Governor-General to look into the matter of the sanitation of the low districts of the city has been filed with the Governor-General.

This committee was presided over by Felix M. Roxas, the alcalde, and commenced its work in the latter part of 1909, several months after

the agitation for the better sanitation of the city had been started as a result of the outbreak of cholera in the city in September, 1908.

Both the Manila Merchants' Association and the Philippine Chamber of Commerce set to work to urge prompt action and a sanitary committee was appointed to make recommendations.

Its report is as follows:

On December 29, 1909, a communication was received from the Philippine Chamber of Commerce in which they endorsed unconditionally the work laid out for this committee and recommended that the work on the swampy land and drainage of the low land belonging to poor people be done at the cost of the Calamity Fund. They further recommended that all the land be divided into small parcels for the purpose of letting contracts so that many contractors could bid on the improvements proposed to be made on the same.

Communications were received from the Legarda Estate and the La Mitra property agents informing the committee that land necessary for streets in the proposed sanitary barrios would be ceded to the city free of charge subject to certain conditions.

At the first meeting it was brought out that several maps existed in the several departments of the government giving different kinds of information regarding the city and its environs. These maps were all combined in one map by the department of engineering and public works. On account of the level character of the topography of Manila, contour lines showing elevations for every six inches of elevation were drawn on this map.

Maps of the following barrios were also prepared: the Legarda Estate barrio, Vito Cruz barrio, and Santa Ana district.

The committee visited several insanitary barrios in the districts of Tondo, Santa Clara, Ermita, and Malate, and found the conditions very bad. The committee then visited a specimen barrio on the San Lazaro Estate where the same class of houses were built of practically the same materials and where the sanitation and health conditions were better. As a result, the sanitary barrio problem was taken up first.

The conditions as found in the insanitary barrios by the committee are described in the report as follows:

One of the greatest difficulties in keeping these barrios in a sanitary condition was the fact that no system or order seemed to prevail in the construction of the houses. It seemed to be the tendency to crowd in as many houses on one lot as possible, without giving the sun a chance to penetrate into the alleys between the houses. In many instances, the openings between houses were not more than 18 inches wide. The drainage was very poor, with pools of stagnant water standing near and under the houses. The question arose where to settle the people who were to be removed from these barrios. The committee visited several

available sites and decided that the grounds of the Legarda Estate were admirably situated for that purpose, as they were at a considerable distance from the more expensive grounds of the city; they were at a sufficient elevation to be drained easily, and the ground could be rented at a reasonable price, inasmuch as it was mostly grass fields.

Negotiations were entered into by the Municipal Board with the Legarda Estate, and the necessary streets were ceded to the city free of charge. The city immediately laid out these streets, installed water mains, so that the neighborhood could conveniently get a wholesome supply of water, built drainage ditches, and laid out the land into proper sized city lots to be occupied by the nipa houses. This, however, took care of only a part of the people that were to be moved, and other available sites were looked for with the result that the Santa Clara Estate, the Mitra Estate, and the Santa Ana barrio were recommended for development.

As before mentioned, one of the main reasons for the insanitary condition of the barrios was the fact that the houses were so crowded together that the sun and air could not reach most of these shacks, and the committee unanimously agreed that one of the causes leading to the insanitary conditions in the old barrios was the construction of houses interior to the street and made the recommendation that no permit for the erection of a structure intended for, or liable to be used as, a human habitation should be granted unless such structure abuts or faces upon a public street or alley which has been officially approved, and recommended that this recommendation be forwarded to the Municipal Board.

The Municipal Board then drew up an ordinance to the effect that no permits for buildings would be granted unless the above conditions were complied with. The question of the legality of this ordinance was raised by the city attorney on the ground that such action would be virtually depriving the owner of the land of the right of disposing of it as he saw fit without due process of law. The matter was referred to the Attorney-General who rendered an opinion upholding the legality of the ordinance.

Tondo Beach.—On studying the available grounds for sanitary barrios, considerable discussion was had upon a scheme of reclaiming a tract of land of the Tondo beach, of an area of approximately half a million square meters. It was, however, the sense of the committee that it would be advisable to consider the filling in of low grounds now in an insanitary condition before taking up the problem of reclaiming more land on the foreshore.

Vito Cruz barrio.—A number of objections have been raised to the establishment of the Vito Cruz barrio inasmuch as it is on the path of the construction of strong material houses and is within that part of Manila which is at present enjoying the greatest amount of construction of the higher class of residences as it seemed undesirable to insert a nipa

barrio in the middle of a highly developed residential district, and it was suggested that a sanitary barrio be established in Santa Ana along the McKinley Road, inasmuch as it is high and dry and near the road, near the street-car line, and near the river, thus affording good communication with the city.

It was, however, the sense of the committee that the projected barrio of Vito Cruz be recommended, and the following resolution was passed:

Resolved, That the plan of the city engineer covering the Vito Cruz sanitary barrio be approved, subject to an arrangement with the owners that lots be leased in not larger dimensions than 12 by 17½ meters, and that the plan submitted by the city engineer covering the prospective barrio of Santa Ana be approved.

The committee expressed it as its opinion, however, that the land in that district is too expensive for a sanitary barrio, but if the owners wish to rent the same for that purpose, they see no reason for any objection. The committee also took up the question as to whether a street should run along the city line in Santa Ana, and was of the opinion that it was not a desirable feature.

Sampaloc barrio, Legarda Estate.—The map of the sanitary barrio of Sampaloc was presented at the meeting of the committee held December 29, 1909, after having received the approval of the Consulting Architect, and the committee was informed that the land for the streets had been deeded to the city by Mr. Legarda and the streets were already monumented.

A motion was made that recommendation be made to the Governor-General that he request the Municipal Board to instruct the city engineer to expedite the opening and expropriation of lands for street purposes and the construction of streets, forthwith; that the Tondo district is a menace to the entire city of Manila, and that until this work is done, even the sanitary barrios will be useless. This motion was carried unanimously.

THE BUREAU OF HEALTH CARNIVAL EXHIBIT.

The exhibit of the Bureau of Health was appropriately placed next to the exhibit of the Bureau of Agriculture, the two booths having a common entrance.

Health and Agriculture vitally concern the Filipino people and constitute the basis of their future prosperity. If between Health and Agriculture there be inserted Education, a trinity of factors is presented upon which depends the evolutionary development of the race. Health is given first place because no nation or people can attain to the highest success without the blessing of health.

The purpose of the Bureau of Health exhibit was to illustrate, in a simple way, the possibilities of health culture as the Bureau of Agriculture showed the possibilities of the soil under proper cultivation.

The first exhibit after passing through the entrance was a miniature model nipa house having sleeping porches, perfectly ventilated rooms, cement drain for yard, sanitary kitchen, and sanitary appointments. If nipa houses are properly constructed they are the most sanitary houses that can be built.

The next exhibit in the aisle was a model of Santa Monica barrio, Tondo, showing the haphazard arrangement of the houses with reference to alignment and street lines; their crowding together like dwarfed trees in a jungle, and the insanitary, imperfectly drained ground-space that can never be kept clean.

The third exhibit showed Santa Monica barrio as it will appear when it is made a sanitary barrio. The difference between an ordinary barrio and a sanitary barrio is the difference between order and chaos.

The sanitary barrio system requires that each house front either on a street or an alley. If there be no alleys they are made. This necessitates the destruction of some houses and the removal of others so that there may be perfect alignment and free ventilation. The ground space is drained and cross-drained until it is dry. All hidden places are uncovered so that the interspaces are accessible to the health-giving rays of the sun and to unobstructed uncontaminated currents of air. With model houses erected in sanitary barrios, former pest holes of Manila will become veritable health resorts.

The fourth exhibit showed the septic vault system, with its filtering and absorbing compartments, which was devised a few years ago by a British engineer and put into operation in certain parts of England. This system has been successfully used in Manila and is the next best thing to the modern sanitary sewer.

The fifth exhibit showed a municipal filter system and graphically illustrated how water is rendered pure by underground percolation.

The sixth exhibit was that of a mountain barrio showing the difference, with reference to purity, between surface water and artesian-well water. The miniature old-fashioned well and the artesian-well, being exact in structure, showed how impossible it is to keep the one from becoming contaminated and how well protected is the other. One of the principal disadvantages of provincial life has been the water supply. This has been overcome by deep artesian wells.

The seventh exhibit was a model of a provincial dry-earth closet designed to replace the insanitary structures that time will doom to destruction without a single protest.

On the two sides of the aisle were arranged large shelves on which were placed various exhibits. Beginning with the left-hand side there was a graphic representation by test tubes and drawings of the nutritive values of different native foods and their relative cost. This exhibit while probably not understood by all the visitors was one of the most

instructive and scientific displays of the Carnival. Supplementing this exhibit were artistically prepared charts illustrating cheap balanced rations for each day of the week with suggestions for appropriate daily variations.

The second shelf exhibit consisted of samples of polished and unpolished rice, thus teaching a lesson with regard to beriberi. It is now known that eaters of polished rice frequently have beriberi and that the substitution of unpolished for polished rice causes the disease to disappear. It is believed that beriberic mothers impart the disease, which is very fatal to nursing infants, through the milk. The remedy is to withdraw the infant from the breast, and substitute artificial feeding until the mother can be cured by proper food. In all Government institutions polished rice is forbidden and its importation may be the subject of legal restriction by the next Legislature. Beriberi is no longer a disease in institutions where unpolished rice is used. It has been entirely eradicated from Bilibid Prison, Iwahig penal colony, Culion leper colony, the San Lazaro Hospitals, and the tuberculosis camps of the Bureau of Health.

Next to the beriberi exhibit were a number of glass jars showing mosquito-breeding processes and how the larvæ could be destroyed by petroleum. This exhibit showed miniature beds with sleepers protected and unprotected from mosquitoes, and was supplemented by charts showing the mosquito in action, thus illustrating how malaria and other mosquito-borne diseases are transmitted. The different phases or cycles of the life of the mosquito were fully explained by charts which also set forth the names of the diseases for which the mosquito can be blamed.

When it is remembered that malaria, dengue, yellow fever, and filariasis are conveyed by mosquitoes the importance of instruction along this line will be recognized.

After the mosquito exhibit came the fly-breeding exhibit which consisted of jars of stable refuse in which flies were being incubated and hatched.

Flies are the enemies of sanitation. They may carry the germs of cholera, dysentery, typhoid, and nearly all intestinal diseases and undoubtedly have a part in the dissemination of tuberculosis, pneumonia, and other dangerous communicable diseases, all of which was forcibly impressed on the public by the charts accompanying this exhibit. May the time soon come when the fly will be in as bad repute as the bedbug.

Near the rear of the booth was the milk exhibit which consisted of a collection of milk containers varying from the bamboo joint to the impervious galvanized-metal can with tight-fitting top which is now required by the Bureau of Health.

Analyses setting forth the improvement of the milk supply under the new sanitary regulations were displayed in chart form. The exhibit

was supplemented by photographs showing the *before* and the *after* of the milk business in Manila and the difficulties which confront the Bureau of Health in its campaign for pure milk and healthy babies.

On the right-hand side of the entrance to the booth between the passage way to the booth of the Bureau of Agriculture and the doorway was arranged a series of pictures portraying cholera and tuberculosis. The cholera exhibit consisted of two pictures, the first showed a family eating out of a common dish with their fingers and illustrated how the disease is frequently conveyed, while the second showed a family that used knives, forks, and spoons thus avoiding contamination of food by soiled fingers. Some one has said "no house, no tuberculosis." It might be said with equal truth, so far as the Philippine Islands are concerned, *no fingers, no cholera*.

Side by side with the cholera pictures was a series of three pictures, with the following significations:

1. A father with consumption coughing and spitting on the floor; an only child crawling on the sputum-soiled floor.
2. The sickness and death of the child from tuberculosis.
3. The burial of the little one and the sadness of the heart-broken mother and the death-doomed father in their childless home from which the last ray of hope had departed.

American and Filipino employees were present during Carnival hours to explain the significance of the exhibits and charts and to emphasize the warning "DON'T SPIT."

Besides the Carnival exhibit the Bureau of Health had over a hundred employees in the grand parade on the opening day. One of the most interesting features of the parade was a large decorated automobile truck on which were seated the pupils of the Training School for Nurses of the Philippine General Hospital, in uniform, followed by about seventy uniformed Filipino sanitary inspectors marching in the procession.

BOAT POPULATION.

Manila like other Oriental cities has a boat population that is separate and apart from the people of the city. They are continually shifting from one place to another with their boat homes and have to be dealt with separately in sanitary matters. These people belong to the poorer class and are not careful of their food and water which fact makes them a floating menace during epidemics of dangerous communicable diseases. There is one saving feature and that is they do not mingle much with the shore people. Their boats are their homes and their social life does not appreciably extend beyond their own kind, except when they go to the cockpits to try their luck with their fighting chickens, which, too, are water dwellers.

In vaccination, inspections or other sanitary measures, they form a district by themselves.

The number of river dwellers in Manila has been estimated as high as 15,000 but it is probable that one-half of this number would be more accurate.

THE PHILIPPINE ISLANDS ANTITUBERCULOSIS SOCIETY.

The Philippine Islands Antituberculosis Society was organized in Manila on July 29, 1910. The Hon. Jacob M. Dickinson, then Secretary of War, was present and was the first to apply for life membership.

The society engaged principally in publicity and educational work until April 1, 1911, when it took over the San Juan Tuberculosis Sanitarium, which had been previously established by the Bureau of Health. On June 1, 1911, the society established five free dispensaries in Manila. The locations of these dispensaries are as follows: Rizal Avenue, No. 542; Calle Barcelona No. 83, San Nicolas; Calle Trece de Agosto No. 39, Paco; Plaza Leon XIII, Tondo; and Calle G. Tuason No. 35, Sampaloc. All of the medical supplies for the sanitarium and free dispensaries, the resident physician at San Juan, and some of the nursing staff are furnished by the Bureau of Health. On June 30, 1911, there were 47 patients in the sanitarium at San Juan, and on the same day 102 patients were treated in the free dispensaries of the society and 145 prescriptions filled.

Branch societies have been organized at Iloilo, Cebu, Zamboanga, and Dumaguete.

The president of the general society is Mrs. Martin Egan, Dr. Olivia Salamanca, a graduate of the Woman's Medical College of Philadelphia, was elected secretary, but owing to the fact that she contracted the disease herself and is now assigned to Baguio, Mr. D. W. Yancey is acting secretary-treasurer.

The motto of the society is "No tuberculosis in the Philippines in 1920."

NEW AMBULANCE SERVICE.

Both the new Philippine General Hospital and the San Lazaro Hospitals division have an electric ambulance service. Formerly all ambulances and other transportation used by the Bureau of Health were kept at the city stables; a part of the department of sanitation and transportation. The facilities of this large and well managed stable contributed largely to the promptness with which dangerous communicable diseases were handled. The service was satisfactory but the day of the old ambulance is past and gone forever in Manila and motor power vehicles have taken their place.

One of the new ambulances is stationed temporarily at the central office of the Bureau. It will be transferred to the Philippine General Hospital as soon as the approaches to the hospital garage are finished. The other ambulance is stationed at San Lazaro Hospital and is used exclusively for dangerous communicable diseases.

Much of the antipathy of the Filipino people against ambulances has disappeared since the new service was put into operation.

Ambulance attendants, who are all Filipinos, are uniformed as sanitary inspectors and are required to observe the strictest decorum in their dealing with the people. So far there have been very few complaints.

CEMETERIES.

The cemetery troubles which encompassed the Bureau of Health and the clergy of the Philippines have disappeared and the administration of Act 1458 rarely causes a ripple on the surface of official duty. Cemeteries are opened and others are closed without a protest.

During the year, about 400 cemetery applications have been acted upon in addition to the routine administrative work.

The most difficult problem is to find suitable land for cemetery property. The law requires that graves be dug 5 feet deep. It is not uncommon for graves to be flooded before this depth is reached, especially during the rainy season.

In Spanish times, the cemeteries with very few exceptions were under control of the Roman Catholic Churches which in turn were closely associated with the Government, which vouchsafed for them the facilities for proper terrepleining and walling. Some of the most interesting places in the Philippines are the old Catholic cemeteries with their solid walls and massive gates standing in their strength and majesty as guards of the silent graves.

MORGUES.

There are three morgues in the city: the one that is conducted in connection with the College of Medicine and Surgery of the University of the Philippines, known as the Herran Morgue; the San Lazaro Morgue for dangerous communicable diseases, run in connection with the San Lazaro Hospitals division; and the Military Morgue.

Much of the antipathy felt by the Filipino people against morgues is disappearing. During the year there have probably been twenty-five bodies sent to the Herran Morgue at the request of relatives of the deceased persons. This is regarded as a hopeful sign that some impression is being made on the prejudices and superstitions that for so many years have opposed the application of modern sanitary principles in the Philippines.

IMMIGRANTS.

Immigrants are examined by the medical officers of the United States Public Health and Marine-Hospital Service. The percentage of rejections was about 0.77 per cent, due mostly to trachoma. Immigrants arriving at Manila are subjected to rigid examination and scrutiny and kept in quarantine sufficient time to make thorough tests for the presence of dangerous communicable diseases.

LEGISLATION.

The following Acts and ordinances pertaining directly or indirectly to public health have been passed during the fiscal year:

Act No. 1196.—This Act pertains to the admission of students from Nueva Vizcaya, Agusan, the Mountain Province, and the Moro Province and in substance is as follows:

"The Director of Health is hereby authorized to admit to the classes for the instruction and training of male and female nurses provided for in Act Numbered One thousand nine hundred and seventy-five, students from Nueva Vizcaya, Agusan, the Mountain Province, and the Moro Province, subject to the conditions prescribed in said Act: *Provided*, That applicants shall be eligible to admission after giving evidence by examination, or in any other manner satisfactory to the Director of Health, that they have received sufficient preliminary training to qualify them advantageously to enter upon such course of study.

"The number of students selected under the provisions of this Act shall not exceed four each year of each sex, nor twelve in all of each sex; and these numbers shall be in addition to the numbers authorized in Act Numbered One thousand nine hundred and seventy-five."

Act No. 2009.—This Act provides that the municipality of Cebu may issue bonds for the purpose of constructing a modern sewer and water system. Work on the sewer system is now in progress.

Act No. 2025 "appropriates the sum of twenty thousand pesos, out of any funds in the Insular Treasury not otherwise appropriated, to carry out the purposes of Act Numbered Nineteen hundred and seventy-five of the Philippine Legislature. The Director of Health may expend said sum for the maintenance of the classes authorized by said Act Numbered Nineteen hundred and seventy-five and for all other purposes related therewith as he shall deem necessary."

Act No. 2032.—This Act appropriates, out of any funds in the Insular Treasury not otherwise appropriated, to contribute to the support of charitable institutions, as follows:

"For the campaign for the extermination of tuberculosis, by the Philippine Islands Anti-Tuberculosis Society, fifty thousand pesos; for the protection of infants, through the institution 'La Gota de Leche,' twelve thousand pesos; for the Mary Johnston Hospital, twelve thousand pesos. Total, seventy-four thousand pesos."

Act No. 2047.—This Act provides funds for the travel and subsistence expenses of the delegates to the International Tuberculosis Congress to be held at Rome, Italy, and amends Act 2042 which was passed for the same purpose.

Under the provisions of this Act Dr. Vicente de Jesus and Mrs. Martin Egan were named by His Excellency the Governor-General as delegates, the former representing the Bureau of Health and the latter the Philippine Islands Anti-Tuberculosis Society.

Manila City Ordinance No. 139.—This ordinance amends sections 32 and 236 of the Revised Ordinances of the City of Manila by requiring that all buildings erected in the city of Manila shall further conform to the requirements of title 11 of Ordinance No. 139. All buildings containing plumbing or plumbing fixtures shall conform to the requirements of chapter 12 of the said ordinance. No building or addition to any building shall be constructed in the city of Manila nor shall any permit or authority be granted for the construction of such building or structure until the Director of Health shall have approved in writing the ground site thereof.

"Courtyards and light wells shall be measured in the clear of all projections

into them with the exception of roof leaders, wall coping, sills, or fire escapes not exceeding one and twenty one-hundredths meters in width. The minimum size of a court for a one-story building shall be six square meters; for a two-story building, nine square meters; for a three-story building, twelve square meters; and for a four-story building, twenty square meters. No court, courtyard, or light well shall be less than two meters in width for a one or two story building nor less than three meters in width for a three or four story building.

"No cubicle or room shall be constructed or maintained in a building intended for human habitation unless such cubicle or room is provided with a window or windows or a skylight having a total area of not less than one-tenth of the floor area of such cubicle or room and opening directly into the external air. For the purpose of this section the words 'opening directly into the external air' shall be construed and held to mean:

"(a) Opening on to any public street, public alley, or navigable water course.

"(b) Opening on to any yard, courtyard, or into any light well or vent shaft of the dimensions specified in section two hundred and twenty-nine of the Revised Ordinances of the City of Manila, as amended by this ordinance. The said yard, courtyard, light well, or vent shaft shall pertain to and form a part of the premises upon which the building is erected.

"(c) Opening on to the external air by means of skylights of which the unobstructed air space above and surrounding the aperture of such skylights shall not be less than that specified for courtyards of light wells in section two hundred and twenty-nine of the Revised Ordinances of the City of Manila, as amended by this ordinance."

Manila City Ordinance No. 140.—This ordinance appropriates the sum of ₱20,000 out of any funds in the Insular Treasury transferred to the city of Manila, as provided by Act No. 1765 of the Philippine Commission, and made available for expenditure for the purchase of a site for a public market in the district of Tondo, and for the removal of the Herran Market building from its present site on Calle Herran, district of Malate, and the reconstruction of the said market building on the new site in the district of Tondo.

ADMINISTRATION OF THE FOOD AND DRUGS ACT.

Pursuant to section 11 of Act No. 1655, which prescribes that the Insular Collector of Customs shall deliver to the Director of Health, upon his request from time to time, samples of food and drugs which are being imported into the Philippine Islands, there has been conducted a regular examination of all consignments that have entered the port.

A circular was issued on January 9, 1911, by the Insular Collector of Customs, at the request of this office, as follows:

THE GOVERNMENT OF THE PHILIPPINE ISLANDS, BUREAU OF CUSTOMS.

CUSTOMS ADMINISTRATIVE CIRCULAR.

MANILA, January 9, 1911.

No. 628.—*Requirements with regard to meat and meat-food products imported after February 1, 1911.*

PARAGRAPH I. The attention of importers of meats and meat-food products is invited to the requirements of the Food and Drugs Act, which will be enforced on and after February 1, 1911, as contained in the following circular issued by the Director of Health:

"Attention is called to regulation 31 of the Food and Drugs Act, which reads as follows:

"(a) Meat and meat-food products imported into the Philippine Islands shall be accompanied by a certificate of official inspection of a character to satisfy the Director of Health that they are not dangerous to health, and each package of such articles shall bear a label which shall identify it as covered by the certificate, which certificate shall accompany or be attached to the invoice on which entry is made.

"(b) The certificate shall set forth the official position of the inspector and the character of the inspection.

"(c) Meat and meat-food products as well as all other food and drug products of a kind forbidden entry into or forbidden to be sold or restricted in sale in the country in which made or from which exported, will be refused admission.

"Administrative decision (F. I. D. No. 74) of the Bureau of Health gives the governmental interpretation of the scope of this regulation.

"It is provided that no meat or meat-food product shall be imported unless accompanied by a certificate of competent veterinary ante and post-mortem inspection.

"A label of identification shall be attached to each package of meat or meat-food products.

"No substance which lessens its wholesomeness, nor no drug, chemical or harmful dye, or preservative other than common salt, sugar, wood-smoke, vinegar, pure spices and salt peter, may be added to meat or meat-food products.

"Meat and meat-food products of horses and dogs are prohibited from entry into the Philippine Islands.

"A meat-food product within the meaning of the regulation is considered to be any article of food intended for human use which is derived or prepared in whole or in part from any edible portion of the carcass of cattle, sheep, swine or goats, if the said edible portion so used is a considerable and definite portion of the finished food. A mixture of which meat is an ingredient will not be considered a meat-food product unless the meat contained therein is a definite and considerable portion of the said mixture. Mixtures such as mince-meat, soups, etc., will not be required to be certified. Products such as meat juice, meat extract, etc., which are intended only for medicinal purposes and are advertised only to the medical profession, will not be considered as meat-food products within the meaning of the aforesaid regulation.

"The following are acceptable forms of certificates:

"(1) I hereby certify that the shipment of
(kind of meat) consigned by to
and designated by (distinguishing marks) is the
product of (kind of animal) which by ante-mortem and
post-mortem veterinary inspection were shown to be free from disease and
suitable for food, and that the meat has not been treated with chemical
preservatives or other foreign substances injurious to health;

"(2) I hereby certify that the meat-product factory of the firm of
..... is located in the meat inspection district of the province
of; that the animals killed in that establishment are
subjected to competent official veterinary ante-mortem and post-mortem inspec-
tions; that all of the meat sold by that firm is the product of animals free from
disease; that all meat and meat-food products of that firm are free from chemical
preservatives or other foreign substances injurious to health.

"The authenticity of certificates shall be certified at the port of shipment by

an officer of the United States Public Health and Marine Hospital Service whenever there is one available, and if not, by the United States consul.

"The acceptance of the certificate will not supersede port inspection as to the condition of the shipment on arrival.

"On and after February 1, 1911, the requirements as to meat inspection certificates will be enforced. Shipments of meat and meat-food products unaccompanied by certificates or shipped under certificates which are considered to be insufficient or faulty in any manner will be, as a consequence, prohibited from entry.

"VICTOR G. HEISER, *Director of Health.*"

PAR. II. Philippine customs officers shall give due publicity to the terms of this circular.

H. B. McCoy,
Insular Collector of Customs.

Considerable difficulty was experienced in getting the shippers to comply with this circular, and it was only after the return of a few shipments that success was attained.

THE BOARD OF FOOD AND DRUG INSPECTION.

The Board of Food and Drug Inspection was appointed by His Excellency the Governor-General, February 11, 1911, in Executive Order No. 7, as follows:

THE GOVERNMENT OF THE PHILIPPINE ISLANDS, EXECUTIVE BUREAU.

MANILA, February 11, 1911.

EXECUTIVE ORDER }
No. 7.

For the purpose of aiding in carrying out the provisions of the Food and Drugs Act, the Assistant Director of Health, the food and drug chemist of the Bureau of Science, the appraiser of the port of the Bureau of Customs at Manila, and the chief city internal-revenue agent, Bureau of Internal Revenue, are appointed members of a board to be known as the Board of Food and Drug Inspection.

The Board is empowered to give hearings on matters concerning the administration of the Food and Drugs Act; it shall hear protests and appeals from decisions and rulings made under Act No. 1855, under section 4 of the Food and Drugs Act; it shall investigate processes of food and drugs manufacture and shall submit a report recommending food and drug standards for adoption under the Food and Drugs Act.

The Board shall further have such functions, properly within the scope of the administration of the Food and Drugs Act, as may be assigned to it by the Director of Health.

The members of the Board hereby appointed shall represent the Directors of their respective Bureaus, and the Assistant Director of Health shall act as chairman. The decisions of the Board shall be advisory to the Director of Health, and shall become final upon approval by the Secretary of the Interior.

W. CAMERON FORBES,

Governor-General.

By THOMAS CARY WELCH,

Acting Executive Secretary.

The Board met as directed by the Governor-General and immediately entered upon its duties.

The food chemist of the Bureau of Science and the chief city internal-revenue agent were appointed a committee to propose certain standards for liquors to the Board and to hear protests concerning proposed standards.

A tentative draft of the principles on which standards are based was prepared and accepted by the Board. The principles as accepted are as follows:

BOARD OF FOOD AND DRUG CONTROL, PHILIPPINE ISLANDS—STANDARDS OF PURITY
FOR FOOD PRODUCTS.

[Tentative draft submitted as a basis for suggestion, March 8, 1911.]

Principles on which the standards are based.

The general considerations which have guided the committee in preparing the standards for food products are the following:

1. The standards are expressed in the form of definitions, with or without accompanying specifications of limit in composition.
2. The main classes of foods are defined before the subordinate classes are considered.
3. The definitions are so framed as to exclude from the articles defined, substances not included in the definitions.
4. The definitions include, where possible, those qualities which make the articles described wholesome for human food.
5. A term defined in any of the schedule has the meaning wherever else it is used in these standards.
6. The names of food products herein defined agree, whenever possible, with existing Philippine trade or manufacturing uses; but where such usage is not clearly established or where trade names confuse two or more articles for which specific designations are desirable, preference is given to one of the several trade names applied, or names most clearly defining the character of the product are employed.
7. The standards fixed are such that a departure of the articles to which they apply, above the maximum or below the minimum limit prescribed, is evidence that such articles are of inferior or abnormal quality.
8. The limits fixed as standards are not necessarily the extremes authentically recorded for the article in question, because such extremes are commonly due to abnormal conditions of production and are usually accompanied by marks of inferiority or abnormality readily perceived by the producer or manufacturer.

Definitions.

1. BEVERAGES.

A. Fermented.

a. *Nondistilled*.—Schedule in preparation.

b. *Distilled*.—Philippine rums. (1) Coco rum, (2) nipa rum, (3) sugar or molasses rum, (4) rums from mixtures of these raw materials, (5) Old rum.

1. Coco rum is the spirit distilled, from the properly fermented sap drawn from the inflorescence of the coconut palm (*Cocos nucifera* L.), from a pot still with or without the employment of a doubler or goose, without the addition of any substance, and shall contain not over 50 per cent (100 proof) alcohol.

2. Nipa rum is the spirit distilled, from the properly fermented sap drawn from the flower stalk of the nipa palm (*Nipa frutescens* Warmb.), from a pot still with or without a doubler or goose, without the addition of any substance, and shall contain not over 50 per cent (100 proof) alcohol.

3. Sugar or molasses rum is the spirit distilled, from the properly fermented juice of the sugar cane, the massecuite made therefrom, molasses from the massecuite or any intermediate product, from a pot still with or without a doubler or goose, without the addition of any substance, and shall contain not over 50 per cent (100 proof) alcohol.

4. Spirits distilled from the properly fermented mixtures of any of the raw materials and in the same manner heretofore enumerated shall be designated by the corresponding names showing the origin of the beverage, as for example: nipa-sugar rum, or nipa-molasses rum, and shall contain not over 50 per cent (100 proof) alcohol.

5. Old rum. Any of the beverages heretofore enumerated shall be entitled to the prefix *old* after the distillate has been stored for not less than three years in wood and mixed only with pure water at the time of preparation for consumption to reduce the alcoholic content to 50 per cent (100 proof) or below. For example, "Old coco rum," "Old nipa rum," etc.

The native method of refining sugar was investigated by the Bureau of Health, as complaints had been received that it was a noxious trade. It was found that this was not true, but that the methods are more or less crude and together with the surroundings more or less insanitary. A study of this matter will be taken up by the Board.

SANITARY REGULATIONS FOR THE CONTROL OF CIGAR FACTORIES.

Every cigar factory in Manila has its own physician to inspect the employees and to see that the different processes of manufacture and packing conform with the requirements of the Bureau of Health. Every employee has a card on which are written the name of the factory, the name and residence of the employee, the age, sex, and position held. On the back of this card are blanks for the notation of each inspection.

The exportation of Philippine cigars met with so much opposition that it became necessary for the Bureau of Health to become sponsor for the sanitary manufacture of such products.

The following circular, issued October 27, 1910, embodies the principal requirements with regard to the sanitary maintenance of cigar factories in Manila:

REGULATIONS OF THE BUREAU OF HEALTH FOR THE SANITARY CONTROL OF CIGAR FACTORIES.

1. The regulations for the sanitary control of cigar factories manufacturing cigars for export to the United States, promulgated by the Bureau of Health December 2, 1909, and April 1, 1910, are hereby repealed and the following regulations substituted therefor.

2. All the rules and measures at present in force for the sanitary maintenance of houses and shops shall be observed most rigorously, giving special attention to personal cleanliness and to the sweeping and washing of floors and walls, and

also to the collection of garbage and refuse in metal receptacles with well fitted covers. (Section 690 of Revised Ordinances.)

3. The air space in tobacco factories per adult employee shall be a minimum of 6 cubic meters, providing that the window area is one-tenth of the floor space of the room. If the window area is one-fifth of the area of the floor, the minimum may be 5 cubic meters per employee.

4. There shall be installed at some convenient place, approved by the Director of Health, in each factory, washbasins of modern type, arranged in rows, with an abundant supply of water, with proper traps and vents and connected with the sewer. One or more special employees of the factory shall have charge of the cleaning and proper keeping of these washbasins and shall see that each laborer or workman before commencing work shall wash his hands with soap and water. The Bureau of Health may, at its discretion, compel this washing to be done with a disinfecting solution.

5. A sufficient number of modern water-closets, properly trapped and vented, shall be installed for the employees of each sex, and also a washbasin fixture of approved type installed for each three flush closets. The closet for men should be equipped, in addition, with a sufficient number of urinals of modern type approved by the Bureau of Health. One or more special employees shall be in charge of the cleaning and proper keeping of this apparatus and shall see that all employees, male or female, carefully wash their hands upon leaving the closet. Upon request of the factory, such employees, as well as those performing similar duties referred to in paragraph 4, will be given special appointments by the Director of Health as subsanitary inspectors.

6. No restaurant, canteen, dining room, or "carenderia" will be permitted in the interior of the factory except those with first-class sanitary accommodations.

7. All employees, upon original entry into the factory and at least bimonthly thereafter, must satisfactorily pass a medical examination by the physician of the factory and be provided with a health report card (form attached), showing name, age, factory number, sex, occupation, residence, and mother's name, with a space for a bimonthly report of medical examination, to be indicated by the initial of the examining physician with the date of his examination.

No employee shall be admitted to the factory at any time without this card showing him to be free from contagious, infectious or desquamative disease.

This semimonthly inspection shall not prevent the inspection at any time of any or all of the employees, male or female, by a health officer whose decision in matters of disease and sanitation shall be final.

8. The use of cuspidors of smooth and polished surface, to facilitate their cleaning, which must be done at least once every day, shall be compulsory in all factories.

9. Young children, especially nursing children, shall not be permitted to enter any cigar factory.

10. It is absolutely prohibited to use saliva, impure water, the lips, tongue or mouth, or unclean hands, in any operation directly connected with the manufacture or packing of cigars and cigarettes. It is also prohibited to trample or walk or stand on the tobacco for any purpose whatever.

11. All the operations in selection of leaves and the drying and manufacture of cigars and cigarettes, except where necessary in process of manufacture, shall be made upon perfectly dry floors and on dry, clean working tables. The warehouses shall be dry and well provided with air and light. The use of clean mats upon floors and tables, also clean, is permitted.

12. For the purpose of preventing so far as possible the falling to the floor and probable contamination of tobacco leaves and other materials used, work

tables shall be provided with throughs along their edges, of suitable material which shall be kept in a proper state of cleanliness.

13. No article of clothing or part thereof, as skirts, "tapis," handkerchiefs, etc., will be used to wrap or remove from one place to another tobacco or other materials used in the manufacture of cigars and cigarettes.

14. No room, parlor, warehouse, or premises, used as a shop or a part of a cigar factory, shall be used as habitation or sleeping room by any person or persons at any time of day or night.

15. All factories shall be kept open to the inspection of the officers and employees of the Bureau of Health, without previous notice, at the hours fixed for inspection by sections 663 to 665 of the Revised Ordinances. These inspections may be made at hours and days wholly unexpected, in order that the degree of attention which the owners pay to the compliance with these rules may be determined.

In the provinces such deviations are permitted from this circular as are made necessary through the lack of a sewer system and modern closet fixtures.

BARBER SHOPS.

Barber shops are the subject of ordinance regulations by the respective municipalities. In Manila the sanitary requirements are in line with those of the most advanced cities of the United States. The shops are inspected regularly and the license applications are passed on by the Bureau of Health.

Now and then a sanitary revival is necessary lest they forget. Such an awakening took place last January at which time the following circular was issued to the barbers of the city and is now being enforced:

Inspection having shown that certain ordinances of the city of Manila relative to barbering are being violated, your attention is called to chapter 75 of the Revised Ordinances, as follows:

"SEC. 727. Every barber when engaged in any operation of his trade shall wear a clean white shirt or coat, and shall keep his finger nails short and well trimmed, and he shall thoroughly wash and cleanse his hands before operating on any person.

"SEC. 728. Every barber shall thoroughly clean and disinfect every razor, comb, or pair of scissors or clippers, or other tool, and thoroughly wash in hot water or in an approved disinfecting solution, before using the same for operation on any person; shall furnish a clean towel for each customer, and shall apply powder to any person only by means of a fresh and clean towel.

"SEC. 729. No barber shall use a puffball for applying powder to any person, or for any other purpose, nor shall any barber apply any piece of alum, camphor, or other substance used for arresting bleeding to any person which has been previously applied for a like purpose to any other person.

"SEC. 730. Every barber shop shall have ample provisions for boiling water and keeping the same hot."

Attention is called to chapter 86, section 814, of the Revised Ordinances, which provides that anyone who shall violate these ordinances, "shall, upon conviction, be punished by a fine of not more than two hundred pesos or by imprisonment for not more than six months, or by both such fine and imprisonment, in the discretion of the court, for each offense."

BUREAU OF HEALTH MANUAL.

The new manual for 1911 is a book of 309 pages, including the index. In the first manual, published in 1909, the following foreword was published:

In placing this first edition of the Manual for the Bureau of Health before the officers and employees of the Bureau, every endeavor has been made to have the provisions contained herein accurate, practicable, comprehensive, and consistent with present and probable future conditions. It is realized, however, that a work so extensive and diversified in its scope will be found after actual use to require many changes and alterations. To the end, therefore, that the next edition of the Manual may be as correct as possible, and at the same time comprehensive and complete, it is respectfully requested that all criticisms, changes, additions, or suggestions of any kind which may occur to the officers and employees of the Bureau, be submitted to the Director of Health in writing, whereupon they will be given careful consideration.

All the acceptable changes that were recommended have been incorporated in the new edition, and the index has been expanded and made to conform to the paragraph numbers, which have been extended so as to include the entire manual.

Many suggestions were received that the revision should be made more applicable to the provinces because in the first edition the laws and ordinances published with reference to communicable diseases pertained to Manila only. Each municipality has its own ordinances, hence it would be impracticable to publish a general sanitary ordinance for the provinces. The district health officer of Surigao has been appointed a committee of one and is now engaged in preparing a draft of a provincial sanitary code. From the published laws and ordinances that are in force in Manila it should be possible to select portions that could be adapted to other municipalities and have them enacted in ordinances by the municipalities.

The Manual of the Bureau of Health has been of great service in systematizing the provincial work, and since law books are not readily available for the use of district health officers, they have served as a legal guide.

In the preface to the second edition will be found the following paragraph, which is indicative of the general policy of the Bureau:

In dealing with the officials and with the people, regardless of their station in life, all employees of the Bureau of Health are enjoined by this Office to exercise tact, perseverance, courtesy, and good nature so as to command their friendship and respect. Energy and earnestness of purpose are powerful factors in the promotion of confidence, while idleness and indifference bring about distrust and opposition, hence employees of the Bureau of Health are expected to be energetic and alert and to exercise initiative ability in planning their work. If this is done the cause of sanitation in the Philippine Islands will go forward to success and discord and discontent will give way to confidence and coöperation.

BOARD OF MEDICAL EXAMINERS.

The Board of Medical Examiners consists of Dr. Isidoro de Santos, president, and Dr. A. P. Goff, member and acting secretary-treasurer, Dr. Pond having resigned her position as secretary-treasurer.

The Board held the usual examinations during the year, and met from time to time as necessary.

Registrations were made as follows:

Doctors of medicine	19
Licentiates of medicine	21
Cirujanos ministrante	18
Midwives	5
Total	63

The following table shows the amount deposited in the Treasury:

Doctors of medicine, 19, at ₱30	₱570
Licentiates of medicine, 21, at ₱30	630
Cirujanos ministrante, 18, at ₱10	180
Midwives, 5, at ₱10	50
Total	1,430

The expenditures were as follows:

Examination fees to Doctor Santos at rates specified in Act 310	₱186
Salary to Doctor Pond for nine months	300
Total	486

BOARD OF PHARMACEUTICAL EXAMINERS.

The Board has held two examinations, the first on July 5, 1910, at which 26 applicants were present, and the second on January 3, 1911, at which 21 applicants were present, making in all 47 applicants for the year. Not a single applicant attained the required average to receive a certificate.

There were issued during the year 110 apprentice certificates, and 6 Chinese druggist certificates, without examination.

There was collected during the year from all sources the sum of ₱1,220. Of this amount ₱380 were examination fees for the examination to be held on July 5, 1911.

The Treasurer's receipts were ₱1,220

The disbursements were:

Salary, secretary-treasurer	₱300
Fees for two members for 26 applicants for the examination held on July 5, 1910, at ₱4.00 each....	208
Fees for two members for 21 applicants for the examination held on January 3, 1911, at ₱4.00 each..	168
Total	676
Receipts over disbursements	544

The Board of Pharmaceutical Examiners is composed of Mr. Hugo Salazar, president; Mr. Andrés Garcia, member; and Mr. Rafael Lopez, secretary-treasurer.

BOARD OF DENTAL EXAMINERS.

The following extract is taken from the report of the secretary-treasurer of the Board of Dental Examiners for the Philippine Islands:

The Board is composed of the following members: A. R. Preston, president; L. C. O'Donnell, secretary-treasurer; A. Vergel de Dios, member.

There were 13 applicants examined in July, 1910, and certificates as undergraduates issued to them. Twelve were examined in January, 1911, and 9 undergraduate certificates issued. A total of 25 applicants and 22 undergraduate certificates issued.

DENTAL CLINICS.

The free dental clinics established by Doctor Ottogy May 1, 1905, are still being conducted. At present clinics are conducted at St. Paul's Hospital, Bilibid Prison, University Hospital, Girls' Orphanage, School for the Deaf and Blind, House of the Holy Child, and Paco Intermediate School. A fee sufficient to cover the cost of material is accepted from those who are able to pay, and in this manner the system of clinics is maintained.

PHILIPPINE TRAINING SCHOOL FOR NURSES.

The number of pupils enrolled during the year was: Senior class, 21 females; intermediate class, 10 males, 14 females; junior class, 23 males, 28 females; preliminary class, 5 males, 6 females; total 107.

There were six graduates from the school, five of whom are now employed as nurses by the Bureau of Health, one having returned to her native town, where she expects to open a private hospital.

The Training School made a splendid record at the time the unfortunate victims of the Taal disaster were in the care of the Philippine General Hospital.

At the time of the calamity the wards which were open were full, and it was necessary to equip several new wards very hastily. This was entered into very heartily by the pupil nurses, and in the course of a few hours all the new wards were in readiness to receive the injured.

Seventy-seven victims of the calamity were admitted to the hospital in the course of a few days, making it necessary to double the hours of work of the nurses immediately. The nurses did this additional work without a murmur, and many of them asked to have their hours of duty increased.

The majority of the victims were very seriously burned and the tender care and the skillful nursing of these young nurses contributed in a great measure to their ultimate recovery.

It is considered that this episode was invaluable to the pupils, not only in the experience gained in the care of burns of all degrees, but also in developing the true spirit of public service for the common good, which is of course the final aim of all their training.

Mrs. Eleanor U. Snodgrass, the first superintendent of the Philippine Training School for Nurses, was ill from December 1, 1910, until her death at the Philippine General Hospital, April 20, 1911. Mrs. Snodgrass was especially adapted for the work in which she was engaged and her untimely death was a profound loss to the school and the hospital. During her illness the school was conducted by Miss Margaret Wheeler. After the death of Mrs. Snodgrass Miss Elsie P. McCloskey was appointed superintendent of the school.

PHYSICAL EXAMINATIONS.

During the year 527 physical examinations were made of persons desiring to take civil service examinations or to enter the Philippine General Hospital Male Training School.

Upon the suggestion of the Bureau of Civil Service, the medical inspector in charge of the examinations has not rejected applicants on account of physical disabilities but has noted such defects on the examination blank, leaving their rejection or acceptance to the Director of Civil Service.

The following is a classified list of the examinations made:

Position.	Number exam- ined.	Position.	Number exam- ined.
First-class patrolman	60	Customs guard	2
Third-class patrolman	71	Cadet, West Point	1
First-class prison guard	86	Junior surveyor	8
Second-class prison guard	43	Third lieutenant, Constabulary	4
First-class fireman	54	Hospital attendant	2
Second-class fireman	19	Clerk	4
First grade, unclassified	4	Physician	1
Second grade, unclassified	9	Bookkeeper	2
Third grade, unclassified	196	Municipal treasurer	1
Machinist	1	Male nurse	6
Mail carrier	1		
Messenger	2	Total	527

Number of Americans and other Europeans examined	151
Number of Filipinos examined	376

OVERCROWDING.

One of the most difficult problems that confronts the Bureau of Health is that of how to remedy the condition of overcrowding. This condition exists in a dual manner, involving not only the occupying of houses by too many people, but the crowding together of buildings on restricted areas. The people who own the land do not desire to sell it, hence in the majority of cases the land is owned by one person and the house by another. The landlord in his greediness to get as much from his land as possible, before he was restricted by law, and even now in some of the

provincial municipalities, permitted the erection of houses and shacks wherever there was space for them regardless of ventilation and street lines. Many of these places have been improved by the application of the sanitary barrio plan.

In the present circumstances little can be done to remedy the condition of overcrowding. If the people are driven out of one place they go elsewhere and overcrowd another place.

It is necessary that the laboring men should live near their work as their salaries are too low to permit of their patronizing the street cars or other public conveyances.

The condition of overcrowding in houses assumes different importance in light-material districts as compared with the old Spanish type of houses.

The old house of solid masonry retains its dampness. The nipa house soon becomes dry. The well ventilated nipa houses are less liable to harbor germs of disease since they are exposed to the dessicating air currents and to the germ-killing power of sunlight.

Overcrowding is a foe to health and if it were not for the nipa house in the Philippine Islands, the detrimental effects of this condition would be more apparent.

The Sanitary Code of Manila specifies the number of cubic feet of air space that shall be contained in a room for each adult and child.

There are not enough houses in Manila to shelter the people and so long as the present industrial conditions prevail there is very little to do more than to correct the conditions wherever possible in the best way that presents itself.

The task of attempting to license all buildings in Manila which come within the classification of "tenement houses" was commenced in June 1909, in the office of the Assistant Director of Health.

The purpose of classifying tenement houses is to prevent overcrowding and to separate them from boarding houses.

Tenement houses include every house, building, or a portion thereof which is rented, leased, let, or hired out to be occupied as the house, home, or residence of five or more families living independently of one another and doing their cooking upon the premises, or by more than three families on a floor so living and cooking but having a common right in the halls, stairways, water-closets, or privies or some of them.

It is unlawful for any person to conduct a tenement, lodging house, or hotel in the city of Manila, without first obtaining a license approved by the Director of Health, which shall specify the number of persons permitted to lodge or dwell in said tenement, lodging house, or hotel, and shall always be displayed in a conspicuous position on said premises; and no person shall have, lease, rent, or keep such tenement, lodging house, or hotel except in accordance with the terms and conditions of

said license. The medical inspectors are required to report the number of rooms and the number of people who can legally sleep in each. He advises whether or not repairs are necessary to place the house in a sanitary condition and if repairs are found necessary, he furnishes a list of the same and recommends approval or disapproval, keeping in view the constant aim of segregating the family and providing private sanitary accommodations.

When a house has been licensed, on the door of every sleeping room a cardboard cartoon is attached giving a number to the room and specifying the number of people who may legally inhabit it.

There were 91 licenses issued during this year.

WATER SUPPLY.

The water from the artesian wells which are being driven throughout the Philippine Islands is examined by the Bureau of Science and passed upon by the Bureau of Health. Many of these samples of water, while giving excellent results from chemical analysis, show the presence of the colon bacillus indicating fecal contamination; this in a great majority of instances is due to the fact that the individual who collects the sample of water permits the water to trickle over his hands while putting it into the container thus washing off colon bacilli from his fingers. An examination of a second sample collected under absolutely aseptic conditions usually shows that the water is of a very good quality.

Many of these wells are drilled on the seacoast and contain an excessive amount of chlorine; where the other ingredients, the ammonia, nitrates, and nitrites are well within the limits of a pure water and the bacteriological examination is negative. In such cases the water is always deemed of good quality. In a few cases, however, the sodium chloride present, from which the chlorine is derived, has been in such great amount that the water was too salty to drink.

Occasionally free ammonia has been in excessive amounts, where the other ingredients are well within the limits of a good potable water and the bacteriological examination has been negative. An excessive amount of free ammonia in an artesian well where the other findings are favorable has not been looked upon as sufficient to discard the water for drinking purposes.

The city of Manila will probably sooner or later install a filtration system for its water supply, in addition to clearing the water shed of all human habitation. Such filtration, however, will not remove the amœbæ, and while it is generally believed at present that the amœbæ ordinarily found in water are not necessarily pathogenic unless such water has been contaminated by fecal matter which contains the pathogenic amœbæ whose habitat is in the colon, it is well to get rid of amœbæ as well as germ life.

Experiments done at the Bureau of Science with hypochlorite of sodium show that this chemical will not kill amœbæ, but experiments done by the Army Board for the Study of Tropical Diseases go to prove that the ultra violet rays do kill amœbæ, and therefore, this may ultimately prove to be the best method of treating the water supply after filtration.

EXAMINATION OF LABORERS FOR HAWAII.

The recruiting of laborers from the Philippine Islands to Hawaii for the Hawaiian Sugar Planters Association started two years ago. Until lately these laborers were examined by medical men for all communicable and disabling diseases before leaving the Islands, in Hongkong, and upon their arrival at Honolulu. Of course the diseased ones were rejected, and the people of Hawaii have had no reason to complain of the introduction among them of *undesirable* aliens. These visitors to Hawaii have always been well treated, well cared for, well fed, and well paid by the various plantations on which they work.

Lately, the cuartel, located at No. 22 San Nicolas, Manila, has been remodeled, refitted, and thoroughly equipped with clean bathrooms, modern water-closets, beds, etc. The rooms are spacious, clean and airy. Athletic and gymnastic appliances, a well-equipped laboratory and an examination room have been installed. A medical man, Dr. A. M. Saleeby, commissioned by the Bureau of Health is employed with a male nurse, a practicante, a maid, an able and tidy cook and several muchachos; and the place is so managed that it looks like a hospital kept under the strictest hygienic supervision.

In the first place, only men of good physique, intelligent, and free from contagious and disabling diseases are selected, after a careful physical examination. They are then admitted into the cuartel to be treated for any slight or accidental ailments, and to be examined and treated for hookworm. The examination is conducted by a biologist from the Bureau of Science who, if he finds them free from hookworms, gives them a certificate to this effect. Men suffering from hookworm disease are readily rejected; but those who have the worm and not the disease are treated until they become free from the parasite. This treatment is carried on on the same lines as that established by the Hookworm Commission in Porto Rico and the United States, with some modifications and changes according to local conditions. One or two treatments, occasionally three, have proved successful and given negative results in 85 to 90 per cent of the cases.

The results of the untiring efforts of the association in this matter have been successful. Filipino laborers now entering Honolulu are not only free from all contagious and communicable diseases, but healthy and strong, able, and anxious to work and develop the country. These laborers from the day they enter the quarters of the association in Manila

until the day they return from Honolulu are being taught the invaluable lessons of cleanliness, exercise, industry, good and wholesome nourishment, and above all, the precious arts of agriculture, money making, and money saving. After the expiration of their contracts they return to the Philippine Islands healthier, more industrious, more enlightened, and more useful citizens.

PROVINCIAL SANITATION.

There is a great desire on the part of the Bureau of Health to have every municipality, barrio and sitio able to provide adequate means for the disposal of its sewage, thereby preventing the contamination of the soil, with the subsequent contamination of the water supply, and in that way preventing the spread of water borne diseases, like cholera, dysentery and typhoid fever, or soil borne diseases like hookworm. With that end in view there will be brought to the notice of all provincial and municipal officers a simple but satisfactory way in which each municipality can control this most important subject at small expense by the adoption of the midden sheds which have been used in Manila with satisfactory results.

These sheds are rectangular structures about 3 meters wide by 10 meters long. They are built of wood, roofed with galvanized iron and the floor made of concrete so that it can be easily kept properly clean and disinfected. A partition divides the house into two parts, one for the use of males and one for females. Each side is provided with four to six pails with tight covers, each pail being inclosed in a box the lid of which is hinged and has a hole cut into it providing the seat. This hole comes directly over the pail and should also have a hinged lid which is kept closed when not in use to prevent the ingress of flies and the egress of foul odors. An attendant is employed to keep the place in a sanitary condition and to see that when a pail is full it is removed, the lid of same is placed thereon and an empty pail substituted. Every night the used pails are removed and the contents disposed of.

In the smaller towns, a shed made of bamboo and nipa would be quite satisfactory and would be much less expensive to build. There should however be a concrete floor or at least one made of hard earth. The contents of the pails may be disposed of by dumping into pits dug in the ground and not less than 5 feet deep. After disposal into said pits, the sewage is covered with a clean light dry earth. When a pit is full care should be taken to have the surface well covered with soil and it should then be untouched for at least three months to allow the septic organisms to act thus decomposing the waste matter and rendering it harmless. It can then be used for fertilizer with impunity.

The pits should be inclosed by a fence and should be located well away from a source of water supply on ground which is high and well drained

and where the level of the soil water is well below the level of the pit bottom. The pit should be roofed over so that rain water is kept out and trenches should be dug around the outside of the fence so that storm water will be carried off instead of draining into the pit.

TRAINING OF PROVINCIAL INSPECTORS.

During the month of March the district health officer of the Province of Bulacan sent eight of the provincial inspectors employed by that province to Manila for instruction. Eight more arrived during the month of April. They remained in Manila for nearly two months and were given instruction along many different lines of work. They were assigned to districts and in company with and under the supervision of the medical inspector, sanitary inspector and assistant sanitary inspectors, were taught how to perform house to house inspection; were sent out, one or two at a time on the disinfecting wagon and allowed to do all kinds of disinfections; given a large amount of practical instruction in vaccination; one or two at a time, they were assigned to mosquito extermination work; practical instruction was given in the diagnosis of leprosy, smallpox, tuberculosis and kindred diseases; they were taken to the various manufactories where knowledge of practical value to them could be obtained; they were taken to the slaughterhouse at killing time and shown the process of killing and dressing animals as well as being shown the difference between healthy and diseased animals.

The greater part of their instruction was received at Station J, but part of them were assigned to Station A, for a short time. The instruction given was of such a character that it should daily prove valuable to them in their provincial duties.

PROVINCIAL AND MUNICIPAL QUARANTINE.

For several years the quarantine privilege of the Philippines was abused. Quarantines were imposed by municipal councils between neighboring municipalities that served no other purpose than to embarrass commerce and make travelers take the longer way round. It would require a standing army larger than will ever be in the Philippines to make provincial and municipal quarantine effectual except in certain districts where the topography of the country permits of only certain definite lines of travel.

Modern research has shown that any quarantine which serves its purpose must include both the well and the sick. Bacilli carriers are often apparently perfectly well, yet the danger from them may be even greater than from the sick, for in the one case proper precautions would be neglected and in the other observed.

Local quarantine is now practically limited to the restriction of the movements of the sick and the contacts of dangerous communicable diseases and is called house quarantine. The questions growing out of

misapplied quarantine have been almost completely relegated to the past through the legal requirement that all quarantine must be approved by this office and by the Honorable, the Secretary of the Interior.

SANITARY MATTERS IN THE MORO PROVINCE.

Important legislation enacted by the legislative council of the Moro Province, for the purpose of reorganizing the health service of that government failed of ratification by the Philippine Commission.

There have been no epidemics in the province during the year. Prompt vaccination has checked the spread of smallpox wherever it has manifested itself.

American ideas of sanitation are not in accord with Moro ideas yet they have many practices or customs which possess merit. The reformation of these people will be a matter of patient education.

ERUPTION OF TAAL VOLCANO.

Taal Volcano, situated 35 miles south of Manila in the Province of Batangas, after several days of premonitory warnings in the nature of earthquakes, discharge of smoke, etc., finally on the night of January 30, 1911, broke out in violent eruption, belching forth a tremendous amount of lava, mud, fire, smoke, and gases with a deafening roar.

That many lives had been lost and much property destroyed seemed inevitable, but the full enormity of the catastrophe was not realized until reports began to come in from the stricken towns and barrios. As soon as it became evident that there were injured persons to care for, Medical Inspector Schapiro, and Assistant Sanitary Inspector Tago and Marques were rushed to the scene of the disaster with a plentiful supply of surgical dressings and supplies, leaving Manila January 31.

Shortly after this a request was received that a doctor be sent to Indang, Cavite, to care for a number of burned persons who had made their escape from the Taal region. Medical Inspector Snodgrass was sent with dressings and supplies, and returned with 18 patients who were sent to the Philippine General Hospital. After his return he was ordered to the stricken district to assist in caring for the injured.

Temporary hospitals were fitted out in Taal and in the barrios of San Nicolas, Pansipit, and Bayuyungan. Later, patients were cared for in the military hospital in Batangas and by the Bishop of Lipa. Information relative to the opening of hospitals was sent to all the barrios in the vicinity with a request that the injured be brought to them. The medical staff was given great assistance in this part of the work by all the other branches of the relief party. The majority of the dressings were done with picric acid or carron oil, with very good results. This Bureau supplied about 1,500 bandages and 1,000 feet of gauze and other dressings in proportion.

A remarkable feature of the work was the surprisingly small ratio of

injured to the number of dead, being in the proportion of about 1 to 14. Approximately 150 injured persons were found and treated while the number of dead reached nearly 2,000.

Burns of all degrees were found but the majority were quite superficial and doubtless caused by explosion of gases. When presented for treatment the injuries were in bad shape due to neglect or improper treatment. In all 78 cases were brought to the Philippine General Hospital with a resulting mortality of only 4. Several cases were complicated by fractures.

On Volcano Island practically all life was destroyed, and the same holds true of the barrios from Subig to Bayuyungan on the west shore of the lake at distances of from 3 to 7 miles.

In a number of instances, much difficulty was experienced in obtaining necessary assistance from the natives, even at good wages, in such emergencies the Constabulary rendered very timely aid in forcing men to work.

Three agencies were responsible for the high mortality.

1. Suffocation by the accumulation of gases. Survivors state that it was almost impossible to breathe prior to the explosions.

2. Evidence shows that the majority of the fatalities were caused by the explosion of gases. Many bodies, both of human beings and animals were found that had been bleeding from the orifices. Many women and animals aborted, doubtless from the terrific concussions of the explosions.

3. Undoubtedly many were drowned by the immense wave which inundated several barrios, and in receding carried practically every movable thing with it. In one instance the bodies of two girls were found impaled on the branches of a tree on the side away from the volcano and several feet above the ground showing the tremendous size and force of the wave.

The United States burial corps did faithful and efficient work under very trying circumstances. About 750 bodies were interred. The large discrepancy between the number of dead and the number of bodies is due to the fact that many bodies were either buried by the mud and ashes or were washed back into the lake by the wave of which mention has been made. The bodies were disinfected, wrapped in sheets, and buried in either graves or trenches as the exigencies of the occasion permitted.

The relief corps under Colonel Rivers speedily supplied the survivors with food and many of them were better off after the eruption than they were prior to it. The attitude of the people as a whole seemed to be one of apathy.

BERIBERI.

The results obtained by substituting unpolished rice for polished rice in institutions of the Government of the Philippines have been all that could be possibly desired; at present in all of these institutions, beriberi is an unknown disease.

The results that have been obtained in these institutions have been

confirmed by the Army by substituting certain leguminous vegetables, like the mongo bean for a part of the polished rice diet, thus practically eliminating beriberi from the native scouts, and they have produced the same results by substituting undermilled rice for highly milled rice.

In order to bring about the general use of unpolished rice in the Philippine Islands, a bill was drafted providing for the imposition of a tax of five centavos per kilo on all polished rice sold here, foreign or domestic, and polished rice was taken to mean any rice which contained less than 0.4 per cent phosphorous pentoxide. Phosphorous pentoxide was used as an index to the amount of polishing which the rice had undergone, or as a convenience in other words; and not because it was assumed that phosphorous pentoxide was the ingredient necessary to eliminate beriberi.

This bill failed to pass due to the adjournment of the Legislature.

PLAGUE.

The last case of plague in the Philippine Islands originating locally occurred April 26, 1906. A case was brought in on the steamship *Ferd Lacisz* on July 23, 1907. This ship came from Chinese ports, Hongkong being the last port of call before arriving at Manila. Another case developed among the quarantined passengers of the steamship *Taisang* which arrived from Amoy on May 25, 1911, with 160 Chinese passengers.

As a precautionary measure a campaign against rodents was instituted in Manila and extra vigilance was enjoined on the officers of the United States Public Health and Marine-Hospital Service at all ports of entry.

A special study of the rats and their fleas is now in progress.

The outlook for the Philippines with respect to plague is encouraging but success will depend on unceasing vigilance and the enforcement of strict sanitary regulations.

On account of the possibility of plague-infected rats being landed in Manila, it was deemed advisable to inaugurate a rat-catching campaign; to this end the assistant sanitary inspectors were supplied with traps and a corps of 16 rat catchers employed. This work was begun in March and by July 1, about 5,000 of the rodents had been destroyed.

The rats, both dead and alive, were sent to the Bureau of Science to be examined for plague infection. It is gratifying to report that all specimens examined have proved negative.

CHOLERA.

The cholera outlook, at the present time, is more promising than it has been for several years. During the year, new infections were reported in only six provinces, viz, Albay, Ambos Camarines, Batangas, Ilocos Sur, Mindoro, and Tayabas. Of these Batangas was stricken the hardest. The infection occurred on July 7, and between that date and November 1,

a total of 1,427 cases was reported. The infection in the town of Batangas was the most severe and proved to be a very stubborn one to overcome, partly on account of lack of coöperation on the part of the people and the fact that the number of Constabulary guards available was insufficient to maintain an efficient house quarantine. True, the municipality at one time employed 40 natives as guards, but the majority of these were worse than useless, as they allowed the people to come and go as they chose, and the guards themselves were very frequently found fast asleep when supposedly on duty.

The only other serious epidemic was the one carried over from the preceding year in the Province of Pangasinan. The first case in this outbreak was reported on March 19, 1910, after this case no more were reported until April 12, between this time and October 3, a total of 4,040 cases occurred, 2,430 of this number being in the fiscal year of 1910-11. The epidemic was practically over by September 1, only a few scattering cases being reported after that date. This epidemic proved the absolute necessity of having the coöperation of the local officials and of the people themselves. The Bureau had a splendid organization to combat cholera, in this province, but the disease entered and gained a foothold in previously uninfected towns in spite of the best efforts of the sanitary force. However, by strenuous efforts, the total number of cases was kept down to about one-half the number that were reported during the epidemic of 1908. After the provincial and municipal officials, as a result of executive pressure being exerted, began to take an active part in the campaign, the number of cases, daily, diminished very rapidly. In this connection, it is only justice to the provincial treasurer to state that he took very active interest in the work from the outset and was of great assistance to the Bureau in its efforts to stamp out the disease.

The epidemics in the other provinces mentioned were of comparatively small proportions. The one in Ilocos Sur, however, was noted for its tenacity, the last case occurred on January 18, 1911, at Caoayan, after a struggle of many months duration.

Bulacan Province, that veritable hotbed of cholera, reported its last case on February 1, 1911, in Obando. When this remains clean for any great length of time, the cholera outlook for the Philippine Islands is very bright, as the disease has apparently been almost endemic in this province.

Manila had a total of 217 cases from July 1, to November 28, when the last case occurred. At no time was the disease epidemic, scattering cases occurring here and there. Doubtless many of the cases were brought in direct from the provinces after they had been infected. The value of the sanitary water and sewer system is clearly demonstrated when dangerous communicable diseases are to be combated.

During the year a total of 6,649 cases occurred, as against 9,957 for the year 1909-10 and 29,323 cases during the year 1908-9. The mortality ranged from 60 to 88.83 per cent. This very high death rate being reported from the Province of Pampanga.

It is most gratifying to be able to state that not a case has been reported in the Islands since March 9, 1911, when 2 cases were reported from Virac, Province of Albay.

It will be a source of much satisfaction to this Bureau when it is no longer necessary for it to use men and money to combat cholera but can use them for the purpose of building up a healthier Philippines.

INTESTINAL PARASITES.

From the investigation of Willets, Rissler, and others the statistical relation of the people of the Philippines to intestinal parasites is fairly well established.

In a paper on "The Statistical Study of Intestinal Parasites on the Tobacco Haciendas of the Cagayan Valley," Doctor Willets reported that he had done his work in connection with the study which was being made by the Bureau of Health for the purpose of determining the percentage of intestinal parasite infections among the general population of the Philippines. He stated that in all approximately 19,000 persons were examined and that among the first 4,000 were the prisoners at Bilibid, 84 per cent of whom were found to be infected with some form of intestinal parasite and 52 per cent had hookworms. The next extensive examination was made at Taytay in which 1,000 persons were examined: 95.90 per cent had intestinal parasites in some form and 10 per cent had hookworms. The next examination was made at Las Piñas in Rizal Province, where 6,000 persons were examined, of whom 90 per cent harbored some form of parasites and 16 per cent had hookworms. After that it was deemed advisable to make a certain number of examinations in inland towns where the influence of the sea would not be felt and accordingly 2,594 examinations were made at Tuguegarao in the Cagayan Valley; here 74.13 per cent were infected and 8.01 were found to have hookworms. The next examination was made at a large tobacco ranch named Santa Isabel, at which 802 persons were examined, and 86.28 per cent were found to be infected with some form of intestinal parasite and 45.38 had hookworms. The next extensive work was done on the hacienda San Antonio, which is probably the largest tobacco ranch in the Philippine Islands; here 4,278 persons were examined and 85.40 per cent found infected with an intestinal parasite in some form and 54 per cent had hookworms. This examination was made at the special request of the owners of the plantation, who reported that their laborers were apparently more indolent than is generally the case in the Philippine Islands.

From the foregoing it will be apparent that with the exception of the

examinations made at Bilibid and those of the haciendas Santa Isabel and San Antonio, the average percentage of hookworm infections is about 12 per cent. Doctor Willets was of the opinion that the work so far done showed that the intestinal parasites had a most important influence on the mortality and morbidity of the Philippines.

The Board for the study of Tropical Diseases of the United States Army reports that "Ninety two and one-half per cent of 119 male Igorots examined showed ova of some intestinal worms in their stools; that the infection rate with uncinaria among adult males was twenty-nine per cent, while that for children was lower, about eighteen per cent" (Journal of Science, November 1910, Section B, Vol. V, No. 5, p. 505.

ANTIMALARIAL MEASURES IN MINDORO.

Malaria has always been a retarding factor in the development of Mindoro Island. In March, 1911, a medical inspector of the Bureau of Health, was detailed to investigate the malarial condition in the southwestern section of Mindoro in the vicinity of the sugar estates.

The barrio of Mangarin, situated on the bay of the same name, is surrounded by mangrove swamps, and the inhabitants showed a splenic index of 57 per cent. Mangarin is the natural port of entry and acts as the infecting focus for this section of Mindoro. The only measures that will effectively remedy the existing condition is to move the barrio to a more salubrious locality. Pandarochan has been selected as the most favorable site for the new barrio.

San Jose, the town site of the sugar estates, was found to be badly infected by the *Myzomicrositi* mosquito. The morbidity from malaria was more than 40 per cent. The following antimalarial measures were instituted to combat this condition:

1. A system of drainage that will remove the stagnant water in the gulleys, lower the subsoil water, and drain the surface water.
2. Clearing of rank vegetation, removing obstructions, and centering the stream of the Magbando Creek, which runs within the town site.
3. Screening doors and windows, adding suale ceilings, and battennings on all quarters; thus rendering quarters practically mosquito proof. (17-meshes-to-the-inch screen.)
4. Mosquito brigade which oils all stagnant waters every six days.
5. Quinine prophylaxis.

FREE DISTRIBUTION OF QUININE.

Sometime ago the Bureau of Health began the free distribution of quinine on an extensive scale and it is hoped by this means to reduce the incidence of malaria. It is apparent that a profound impression has been made on the people regarding the value of this medicine as a prophylactic and curative remedy.

The following circular was first sent out to all district health officers

as a basis on which to estimate the quantity needed and to obtain the coöperation of suitable persons in every district to assist in the undertaking:

To the end that quinine may be placed in the hands of the people of the Philippine Islands, where it will do the greatest amount of good, district health officers will furnish this office with a list of responsible persons residing in each municipality of their district, who may be relied upon to attend to the proper distribution of the quinine, and who will see that the quinine actually reaches the people for whom it is intended. These persons will be expected to furnish a report to this office at the end of every month on a special form to be supplied for that purpose.

It is believed that the employees of the Bureau of Education would be glad to undertake the work and the Director of Education approves of such service if they are willing to undertake it. Employees of other Bureaus permanently stationed in municipalities would probably also be pleased to coöperate with the district health officer in this matter.

The quinine will be furnished in 0.3 gram (5 grain) capsules. The list furnished should state how many capsules or doses each person chosen in a municipality as a distributing agent is prepared to receive and carefully issue.

It is understood that in those localities, where malaria has a seasonal prevalence, the quinine will be administered in regular and frequent periodic doses to as large a percentage of the population as possible, as a prophylactic measure, just preceding the time anticipated for the seasonal recrudescence, one capsule a day being sufficient for this purpose.

The free distribution of quinine has undoubtedly been an important factor in improving the health of the people.

TYPHOID FEVER.

Typhoid fever is a reportable disease in Manila, yet it is not always reported. From some unknown reason, this fever has never manifested itself in the Philippine Islands with the same deadly violence that it frequently does in the United States.

As soon as a case is discovered in Manila it is sent to the Philippine General Hospital or may be isolated in the house if the conditions admit of it. It is the walking cases and the bacilli carriers that constitute the danger.

The Bureau of Health is trying to impress upon the people the similarity of the methods of acquiring typhoid fever and cholera and the importance of disinfection in both diseases.

In view of the fact that up-to-date knowledge of this disease shows that it is an infectious and communicable disease, and that there is no disease which requires more thorough and careful sanitary management to prevent the transmission of infection to other members of the family and indirectly to persons and households outside, it is rather discouraging to learn that some physicians put themselves in a position of considering typhoid fever a nontransmissible disease.

The three principal directions in which we must look for a diminution in the present unnecessarily great prevalence of typhoid fever is in an efficient control of the public water supplies, an assurance against the transmission of the infection through milk supplies, and a much more uniformly intelligent and efficient management of cases of typhoid fever in the sick room. Unclean hands are a menacing factor that is of prime importance.

The following are the special instructions with regard to the disease:

The aim of the sick-room management should be: The prompt destruction of every vestige of infection leaving the patient, in the discharges from the bowels and kidneys or in sputum, so that privy vaults, the ground, the home surroundings, or wells, springs, or other sources of water supply may not be infected. The utmost cleanliness of the patient and his surroundings and also of the hands of those in attendance should be the rule.

The work of disinfection should begin with the beginning of the treatment of cases and should continue during the whole course of the disease. All articles of bed clothing and of body clothing should be disinfected as soon as they are removed from the bed or from the patient.

VACCINATION.

During the year 1,167,984 vaccinations were made. Many were vaccinated without record being kept. This is especially true of those who were vaccinated by private physicians.

While there seems to be no organized opposition to vaccination, many escape; the same ones are, to a considerable extent, vaccinated year after year, and the same erring ones escape until smallpox destroys them.

The Filipino people believe in vaccination, but their strong fatalistic tendencies induce them to take chances that their better judgment condemns as unnecessary and hazardous. They are first of all fatalists and it is this philosophy that rules their lives.

In the United States and England there are antivaccination societies composed of people who seem to have the one idea that all the ills of the world are due to vaccination. Strange to say the prime movers in these societies are physicians; yet it is difficult to see how any observing medical man could question experience, evidence, and science so far as to doubt the thoroughly established fact of the practical influence of vaccination on smallpox.

Looking at the question of vaccination from a business man's standpoint, the man who employs labor, for instance, there are two problems which confront him, either to have his employees vaccinated or to allow them to go unvaccinated. It is the easiest thing in the world for an employer of labor to have his employees properly vaccinated and thus escape the annoyance and the hardships which may be worked upon him by being obliged to close his place of business during quarantine and fumigation by this Bureau. It is earnestly advised that every business

man, every corporation and company insist at once that their employees be vaccinated and that in the future a certificate of vaccination be furnished from some reputable physician before a new employee is hired. By making this a routine practice, business houses will escape the necessity of having their places closed. It is an extremely simple thing to be vaccinated under the conditions as they exist to-day. Be it understood that all vaccine virus is now manufactured under the control of the Philippine Government. Human virus is no longer used. The virus in use to-day comes from young calves, which animals are tested as to disease and after inoculation the vaccine itself is tested as to its absolute purity, at which time the Government allows its sale. There is absolutely no danger in its use. More than ten million people have been vaccinated in the Philippines without a single death occurring, and the disease, which had been prevalent since the occupancy of these Islands by the Spaniards, has practically ceased to exist.

YAWS.

During the year a number of cases of yaws have been treated in Baguio and Bontoc and at the Bilibid and Philippine General Hospitals, with Salvarsan by intermuscular injections. In each case the disease disappeared rapidly and entirely.

Tending to prove that this disease is gotten by direct contact, one of the medical inspectors in the Bureau of Health saw a case of yaws in a mother and her child. The lesions in the mother were located in the region of the hip. Filipino mothers frequently carry their children astride the hip and the child in this case developed lesions on the buttocks in the exact situation where it would come in contact with the lesions on the mother's hip.

The Army Board for the Study of Tropical Diseases, in a report in the Philippine Journal of Science, Section B, Volume 6, No. 3, states that the Wassermann reaction is positive in patients with yaws.

SANITARY ENGINEERING DIVISION.

The following extract is taken from the report of the sanitary engineer for the Bureau of Health, Mr. George H. Guerdum:

The housing of a people forms an important part in the problem of proper preservation of the public health.

In the Philippine Islands, coincident with the subject of municipal drainage, municipal water supply, and municipal scavenger service, the no less important branch of house sanitation has received the attention of the sanitary authorities. In some ways it would appear that in a tropical country, where houses are not erected for protection from cold weather, the problem would be very much simplified, yet it has developed that in this country the increased danger of infection from transmissible diseases in a large measure tends to offset any such advantage gained.

Preliminary to regulating the building operations the following items have been carefully considered:

First. The natural habits and customs of the people.

Second. The mode of transmission of diseases most prevalent and most dangerous to the community with known means of prevention.

The typical house in the Philippines is a palm leaf or grass covered bamboo structure which outside of the centers of population is the type generally used and on the outskirts of every town including Manila hardly any other form of house prevails.

With the providing of a municipal water supply, surface drainage, municipal convenience stations, and a mild form of building supervision this style of construction has been rendered quite sanitary and will probably be continued in use for a very long and indefinite period. In the congested districts, however, this form of construction, on account of danger from fires and waste of ground space, cannot be used, and recourse must be had to strong material buildings.

The materials at hand and the congested, disease-breeding conditions confronted a few years ago in Manila have not been encouraging. Unsatisfactory enforcement of existing building regulations, long rows of houses opening into back yards used in common by hundreds of people; lack of kitchen facilities, cooking carried on in clay fire pots stuck around anywhere where protection could be secured from sun and rain, foul privies, used by all tenants of both sexes, lack of drainage, etc., were some of the evils encountered.

Conditions are by no means ideal now, as a house once erected is a very lasting affair and when built on insanitary lines is difficult to alter; a great advance has, however, been made. The large back yards common to dozens of doors and scores of families are now discouraged. Common privies used by many families are removed whenever possible and individual water closets for each house connected to the sewer system substituted, or in some cases, removed altogether and contiguous municipality controlled public convenience stations substituted.

With a view to improving future construction and educating local architects and house owners of the Philippine Islands in the principles of modern house sanitation a series of house designs has been prepared which is distributed gratuitously to interested persons. One of the keynotes of all of these plans is unit construction and the avoidance of tenement house conditions and evils, such as common toilets, kitchens and yards. The aim has been to make each apartment complete in itself with a separate entrance, kitchen and small yard surrounded by an effective wall. As many units may be constructed as the property will hold.

The value of the *esteros* or estuaries forming the delta of the Pasig river in its passage from Laguna de Bay to Manila Bay has been recognized since the earliest times. Until about 1860 these *esteros* were valuable chiefly for their commercial importance but with the introduction of the Carriedo water system in 1884 these waterways began to receive and carry crude house sewage. With the advent of the American occupation in 1898 and the extension of the water carriage system of sewage emptying directly into the *esteros*, they became very much polluted and probably assisted in the spread of the cholera epidemic of 1902. Since then a system of bacteriolytic tanks has been constructed to purify crude sewage before introducing it into the waterways of Manila. More recently, in 1909, a complete system of sanitary sewers for Manila has been completed at a cost of several million pesos, so that practically no crude sewage is now carried by these waterways.

It is gratifying to note that public and official interest is now centering

around these important streams. The Bureau of Navigation is extending dredging operations and it is hoped that an appropriation may be made for retaining walls to protect the banks and to maintain sanitary conditions. While some retaining walls have been built, these are merely sufficient to illustrate what is necessary.

The number of premises connected to the sanitary sewer in Manila during the year was 1,958; the total number of premises now connected to the sewer being 1,824 amounting to one-fourth of all the premises in Manila.

The construction of streets and drains for sanitary barrios has not ceased during the year and model barrios are now completed and occupied by many thousands of families who have been ejected from extremely insanitary shacks and tenement houses in Sanpalo, Santa Cruz, Tondo, and San Nicolas. The project for a sanitary barrio at Santa Ana has not yet progressed to a point where construction work can be commenced, due to the fact that the property desired is owned by minors who cannot dispose of land needed for street and other purposes until April, 1912, when they become of age and the property may be divided.

Forty additional public convenience stations have been erected during the year.

The importance of maintaining these stations, which now number 174, cannot be overestimated, as they form a most direct means of preventing the spread of dangerous intestinal diseases.

The Mariquina watershed reservation, which is under the control of the City of Manila, comprising an area of 280,000,000 square meters is located at its nearest point about 15 miles from Antipolo and about 45 miles from Manila. The one town of Bosoboso located within the reservation has been vacated by the municipal authorities of Manila; all houses and lands having been purchased. There is however a considerable portion of the reservation which is still claimed by private parties. There are however very few people on the property and in fact it is nearly abandoned as far as agricultural or other pursuits are concerned.

An ordinance prepared in this office and approved by the Governor-General is now pending before the Municipal Board of the city of Manila. This ordinance provides against trespassing on the watershed; prohibits all agricultural pursuits, hunting, fishing, cutting of timber, bamboo and grass, the pollution of streams and bathing in water courses, and provides for sanitary guards and determines the police jurisdiction and *modus operandi*.

The relations of this office with the Municipal Board and its various members is now most cordial. Too much cannot be said with reference to the prompt and efficient manner in which the city engineer, Wm. H. Robinson, has seconded all efforts tending to a betterment of sanitary conditions in Manila. With the continuance of the present policy many of the deplorable conditions heretofore encountered have been or are being corrected. With provision made for the correction of insanitary conditions in Manila the danger of transmissible diseases in the provinces is reduced to a minimum.

Provincial work or work outside of Manila and its environments has been mostly of an instructive or advisory nature. When it is noted that Manila has a population of 234,000 inhabitants, and that the town next to it in importance and size is Cebu with a population of only 55,000 it will be seen that the great mass of structural sanitation to be performed is in Manila. Nevertheless it has been the aim to make the division of sanitary engineering of the Bureau of

Health as useful to the District Health Officers as possible. Every effort has been made to answer promptly all inquiries with reference to such structural problems in sanitation as reach this office from various parts of the Islands. Probably the most important question now confronting provincial towns is a safe and economical method of night soil disposal combined with a system of convenience stations.

The year just closed has been the most progressive encountered in many years, increased activity in building and structural sanitation being noted from many parts of the Islands, and especially in Manila.

With the continuance of the present conditions danger from the spread of such diseases as plague and cholera will be reduced to a minimum.

SANITARY ENGINEERING DIVISION.

Statistical information by quarters.

	July to Sep- tember.	October to De- cember.	January to March.	April to June.	Total.
Orders pending June 30, 1910.....					695
Minor orders issued.....	58	32	116	129	335
Sewer orders issued.....	88	296	193	329	906
Premises ordered vacated.....	0	285	414	198	897
Vacated.....	0	3	228	406	637
Minor orders completed.....	72	23	108	56	254
Sewer orders completed.....	204	159	156	183	702
Orders canceled.....	34	89	24	17	164
Legal prosecutions.....	1	0	4	80	85
Orders pending June 30, 1911.....					991
Amount of fines.....	P 50	0	P 45	P 63	P 158
Building plans:					
Strong materials—					
Approved.....	105	108	116	136	465
Completed.....	87	57	35	34	163
Buildings, light materials, plans approved.....	210	127	157	86	580

Statistical information by stations.

	Health districts.					
	No. 1.	Nos. 2 and 3.	No. 4.	No. 5.	No. 6.	Total.
Orders pending June 30, 1910.....	253	348	68	9	17	695
Minor orders issued.....	59	62	77	101	36	335
Sewer orders.....	208	366	267	45	20	906
Vacating orders.....	25	411	311	96	54	897
Minor orders completed.....	50	43	29	101	31	254
Sewers orders completed.....	239	346	90	6	21	702
Premises vacated.....	7	386	211	12	21	637
Orders canceled.....	30	28	97	8	1	164
Prosecutions.....	0	61	3	1	0	85
Pending orders June 30, 1911.....	219	308	293	123	53	991
Fines.....	0	P 148	0	P 10	0	P 158
Building plans:						
Strong materials—						
Approved.....	119	116	138	46	46	465
Completed.....	34	47	80	38	14	163
Light materials.....	3	1	124	297	155	580

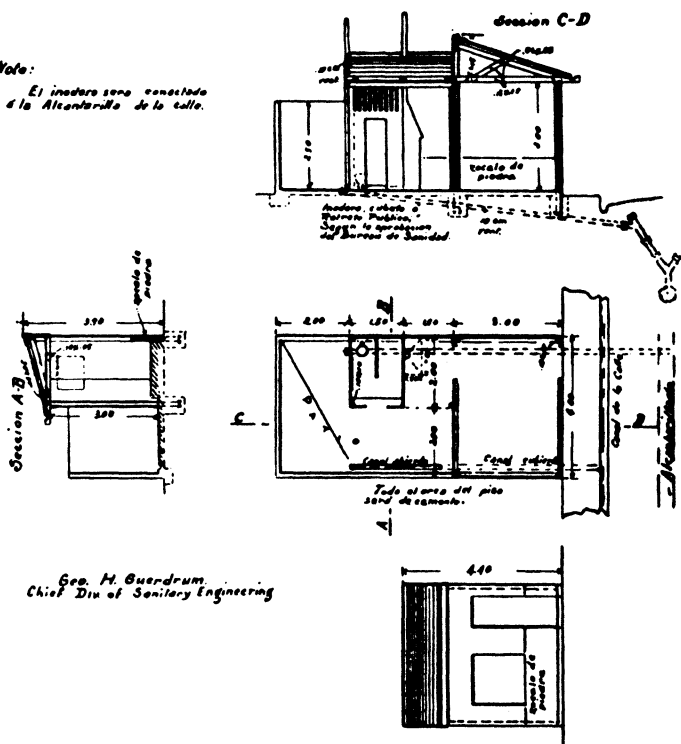
Sixty-seven cases dismissed on account of defendants complying with order of the court.

DEPARTMENT OF THE INTERIOR.
BUREAU OF HEALTH FOR THE PHILIPPINE ISLANDS.
DIVISION OF SANITARY ENGINEERING
Escale 1:200mts.

CASA DE UN SOLO PISO

Note:

*El inodoro sera conectado
a la Alcantarilla de la calle.*



Geo. H. Guerdum,
Chief Div. of Sanitary Engineering

FIG. 1.

Estimated cost, ₱600.

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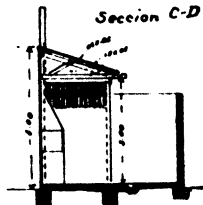
DEPARTMENT OF THE INTERIOR
BUREAU OF HEALTH FOR THE PHILIPPINE ISLANDS.
DIVISION OF SANITARY ENGINEERING

Escale 1:200 mts.

Elev. Frontal

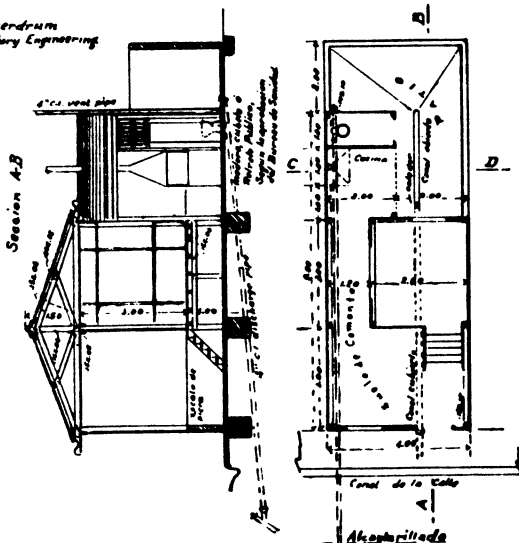


Seccion C-D



Geo. H. Guerdum
Chief Div. of Sanitary Engineering

Nota: "El inodoro será conectado a la alcantarilla de la calle."



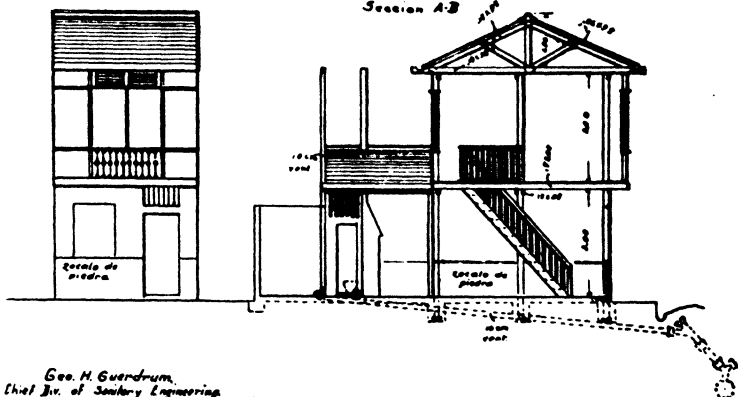
CASA DE UN SOLO PISO CON ENTRESUELO

FIG. 2.

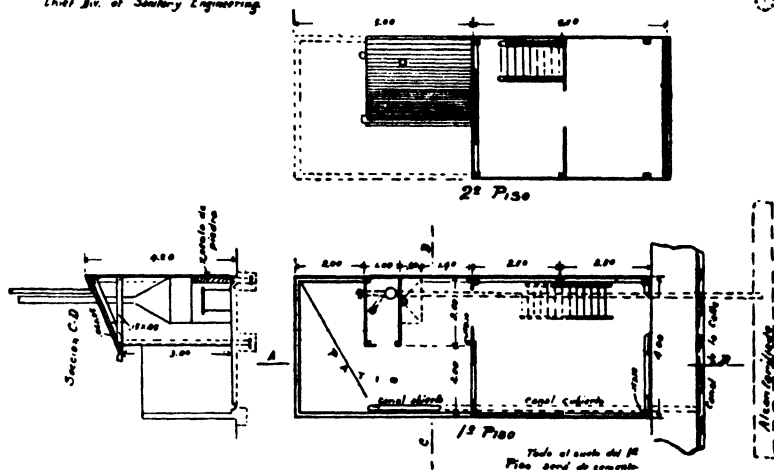
Estimated cost, ₱900.

Escala 1:200 mts

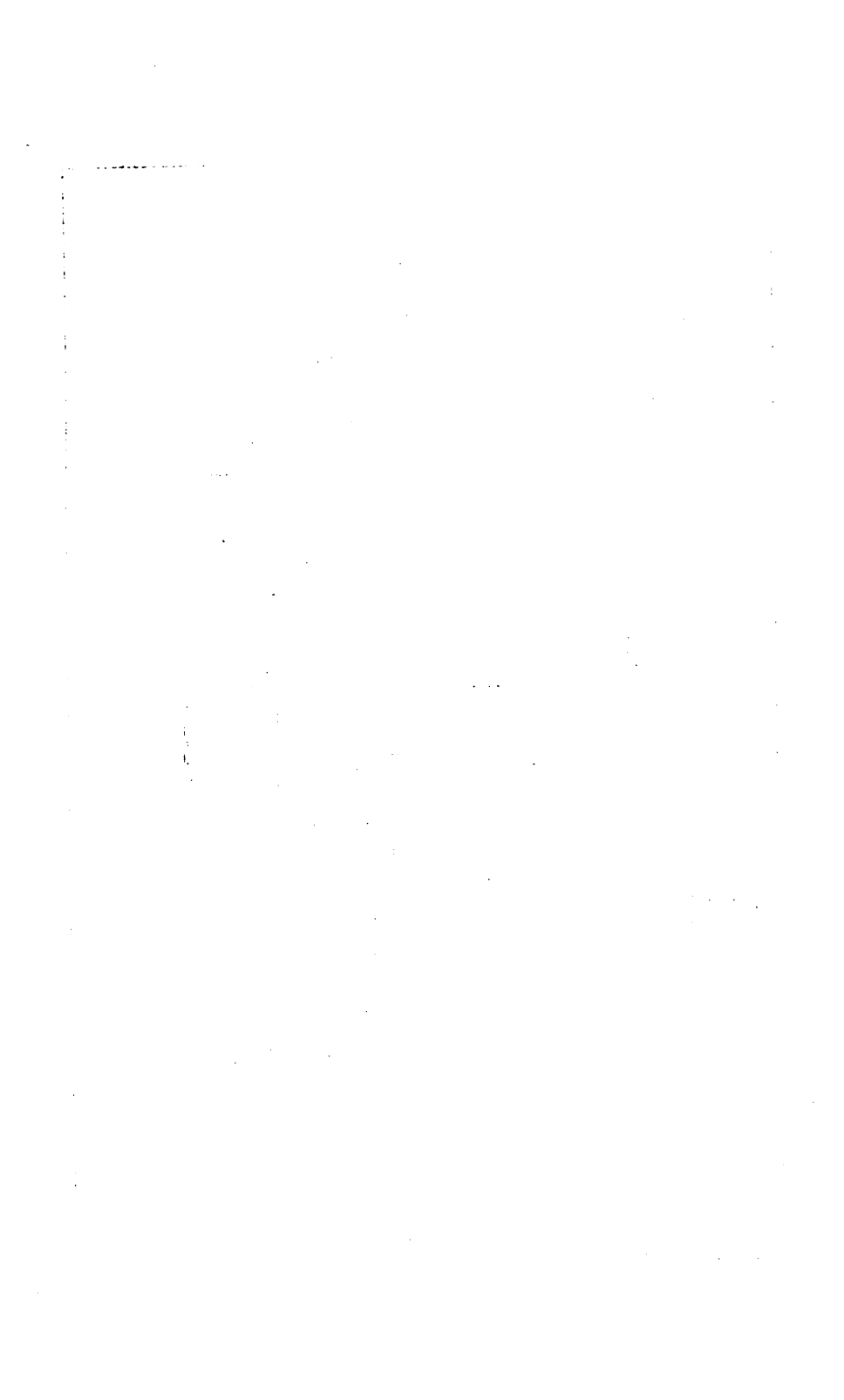
Section A-3



Geo. H. Guerdum,
Chief Div. of Sanitary Engineering.



Estimated cost, ₱1,500.



DEPARTMENT OF THE INTERIOR.
BUREAU OF HEALTH FOR THE PHILIPPINE ISLANDS.
Div. of San. Engineering.

Scale 1/200 m.

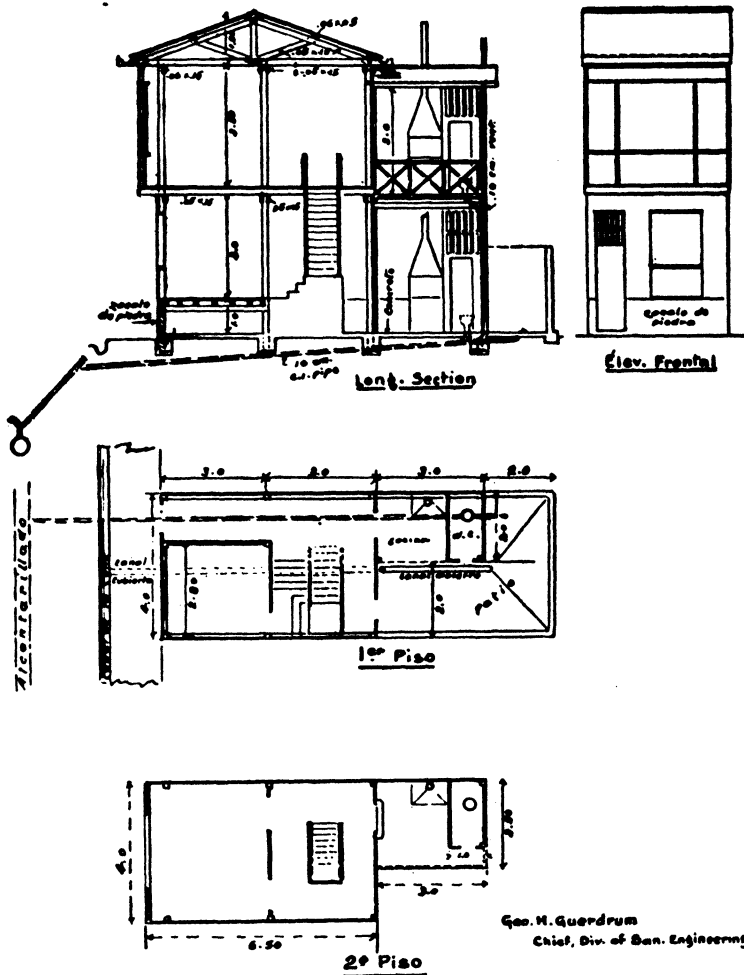
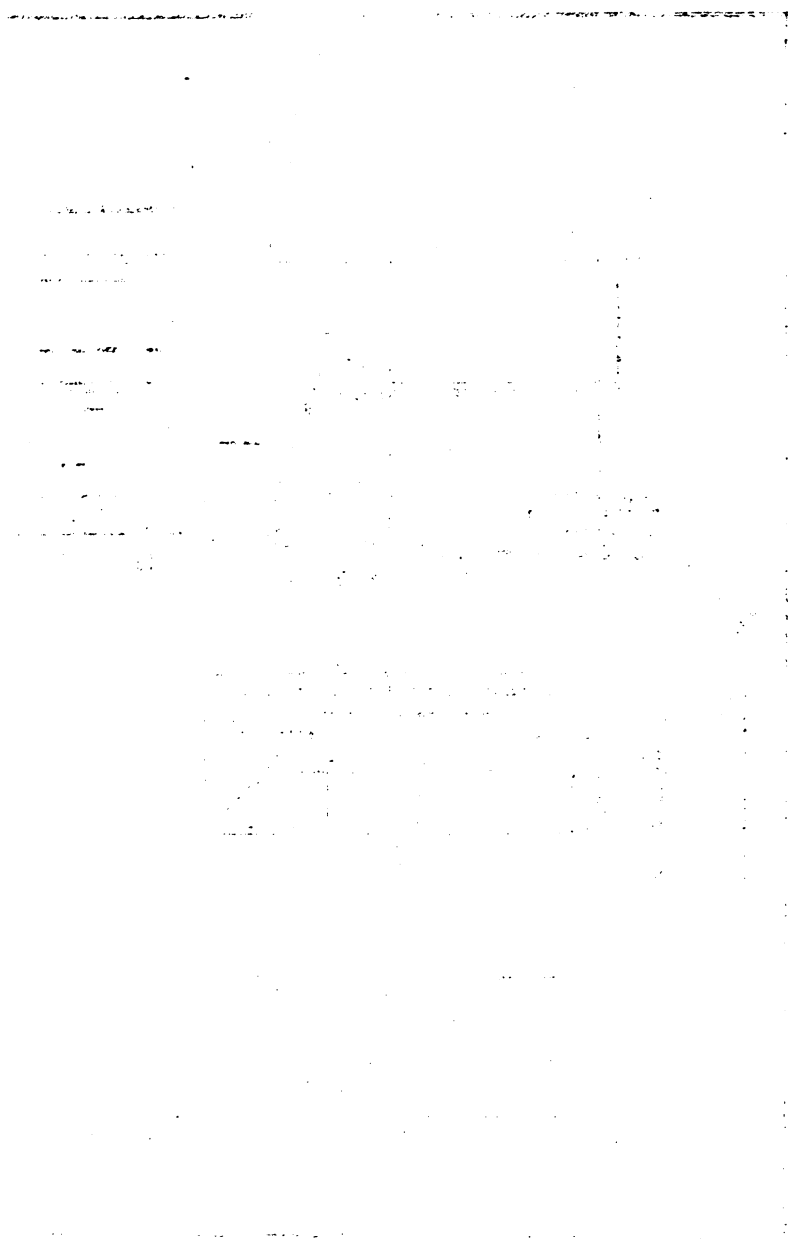


FIG. 4.

Estimated cost, ₱2,000.

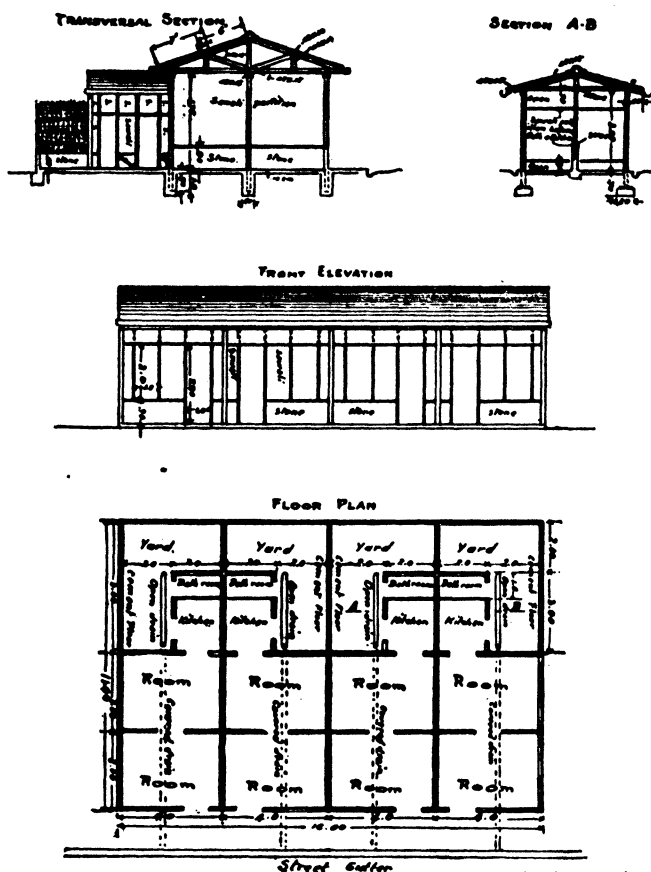


DEPARTMENT OF THE INTERIOR
BUREAU OF HEALTH FOR THE PHILIPPINE ISLANDS.
DIVISION OF SANITARY ENGINEERING

MIXED MATERIAL APARTMENT HOUSES FOR SANITARY BARRIOS

Manila P.I.

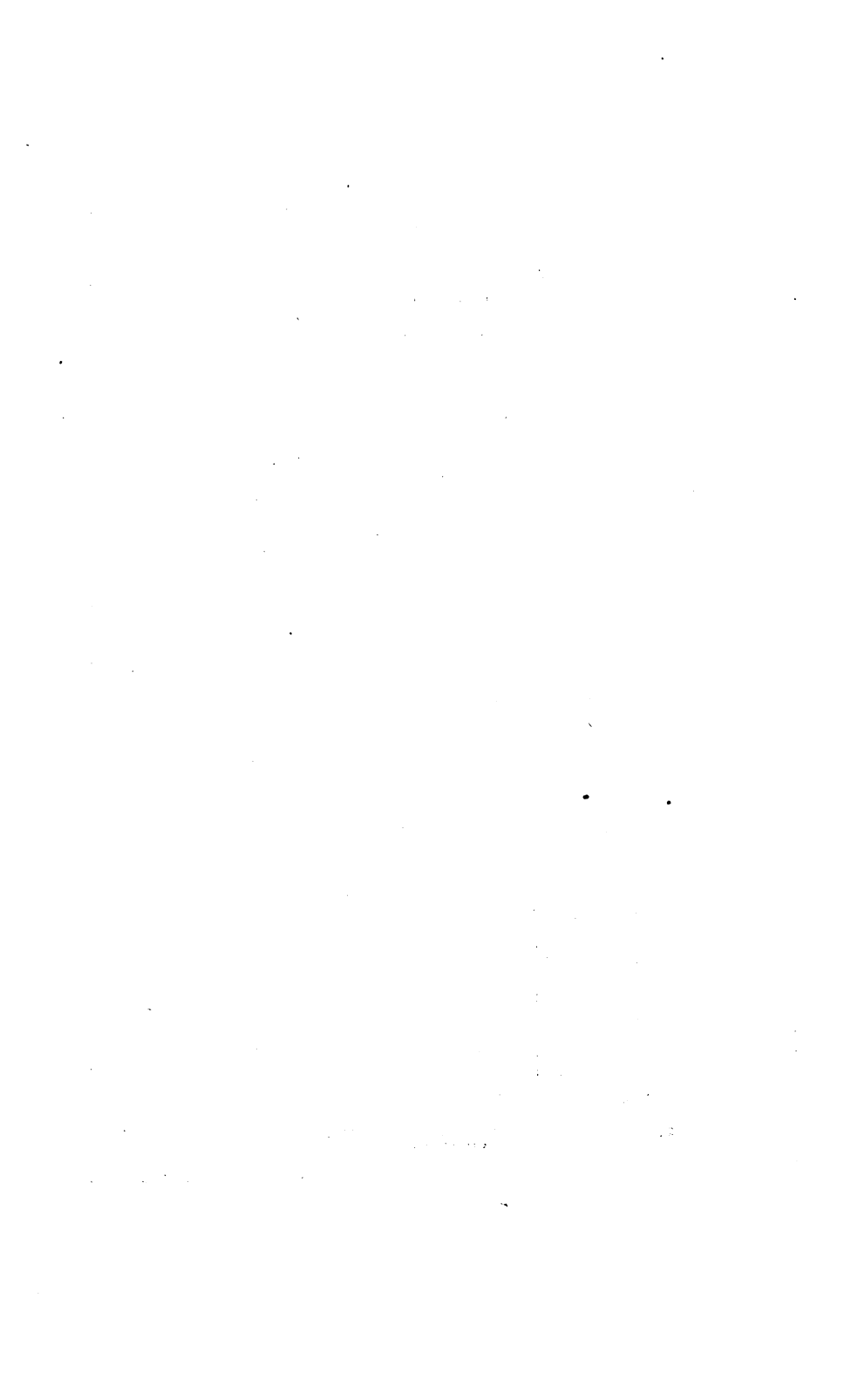
Scale 1:280 mls.



Geo. H. Guerdum
Chief Div. of San. Engineering.

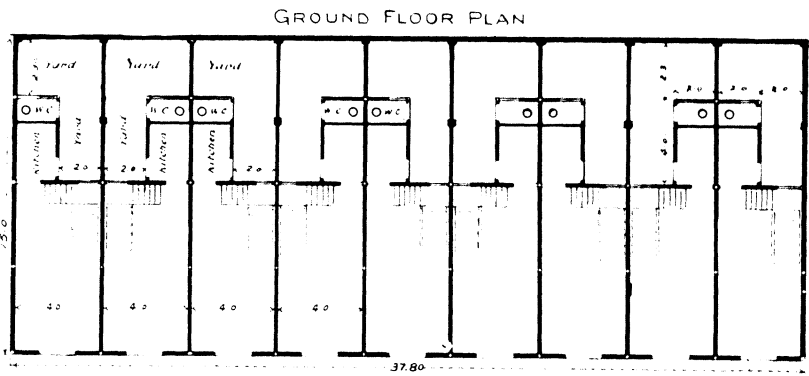
FIG. 5.

Estimated cost, ₱1,200.



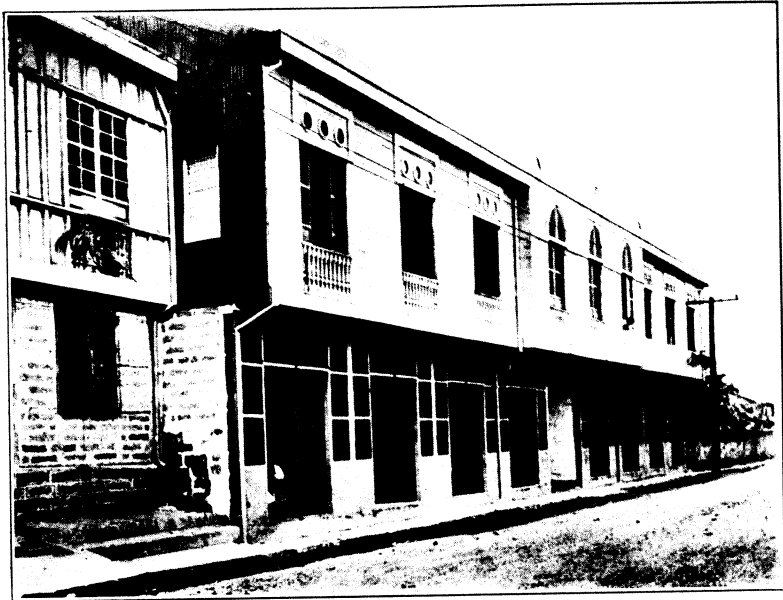


A NINE APARTMENT BUILDING ERECTED WITH PRIVATE CAPITAL, CALLE SAN MARCELINO, MANILA.



[Scale: 1,360 meters.]

FIG. 6.



AN EIGHT APARTMENT BUILDING ERECTED WITH PRIVATE CAPITAL.
CALLE BENAVIDES, BINONDO, MANILA, P. I.

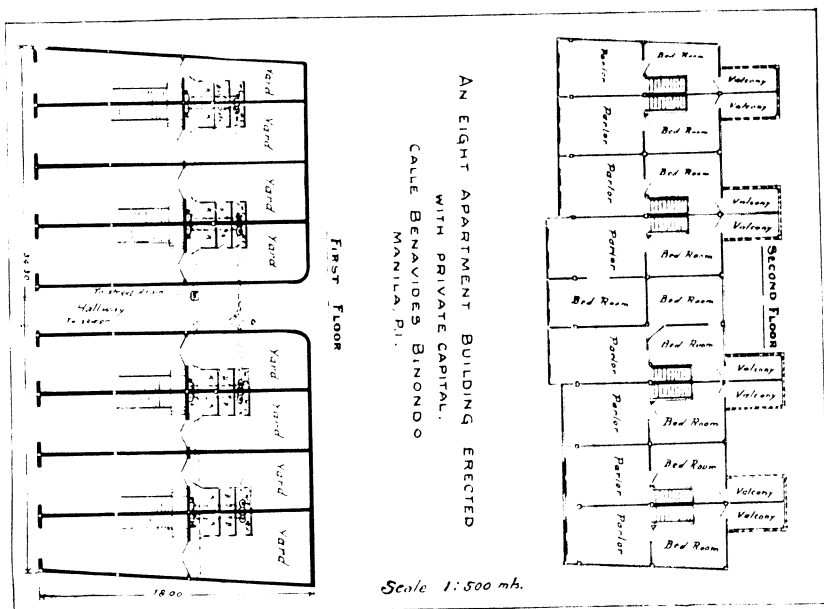


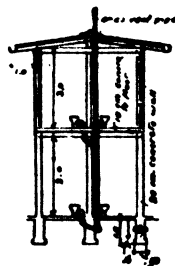
FIG. 7.

DEPARTMENT OF THE INTERIOR,
BUREAU OF HEALTH FOR THE PHILIPPINE ISLANDS.
Div. of San. Engineering.

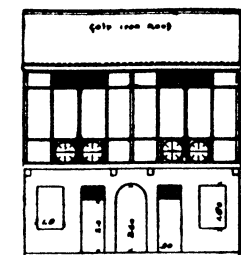
PLAN OF APARTMENT HOUSES
Scale 1:280 m/s.

Geo H. Querdum
Chief Div. of San. Engineering.

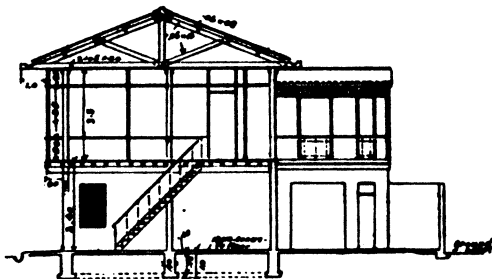
SECTION C-D



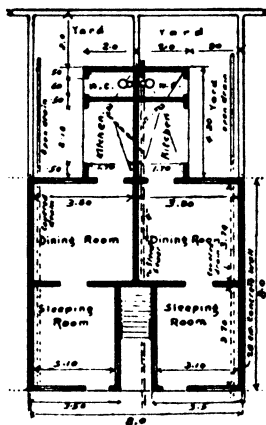
FRONT ELEVATION



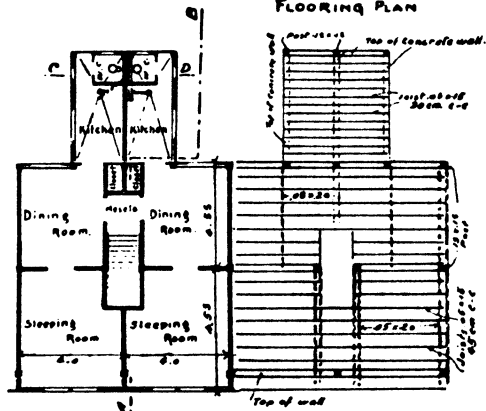
SECTION A-B



1ST. FLOOR PLAN
Reinforced Concrete

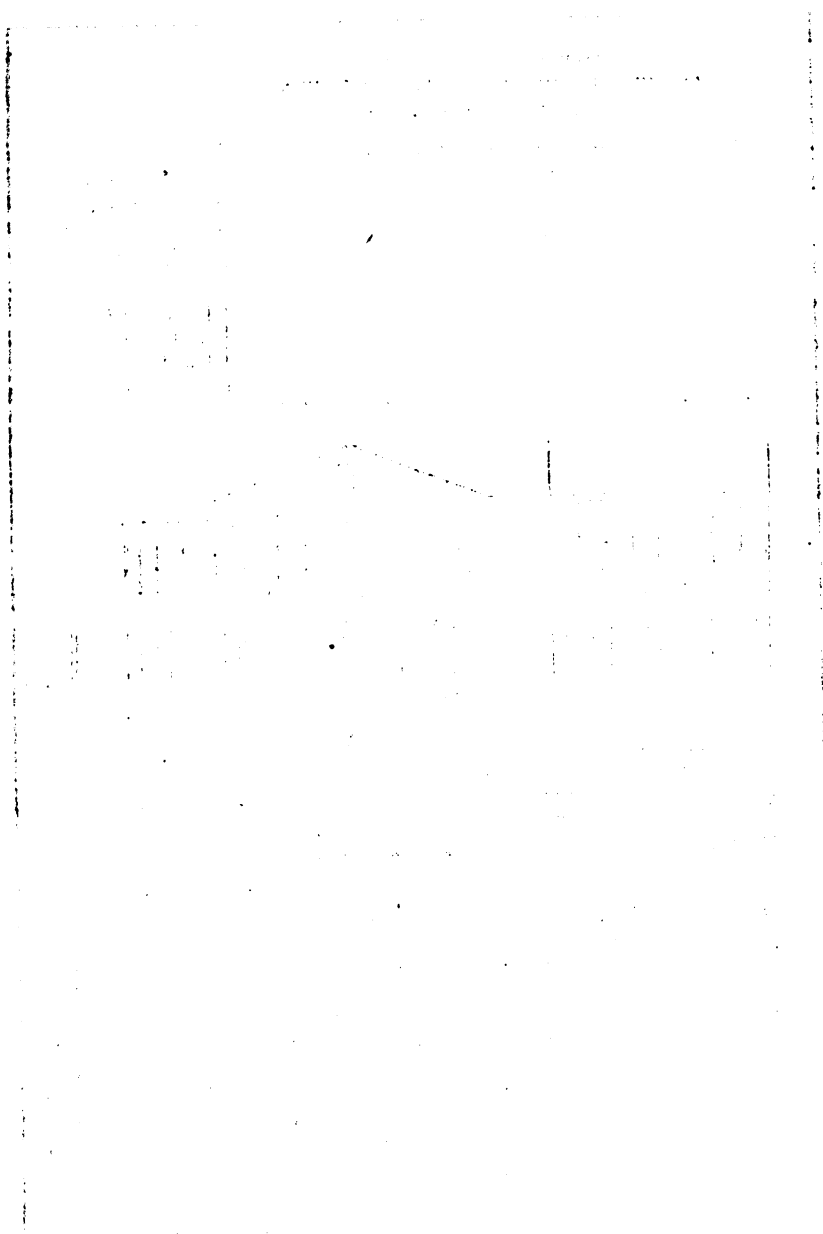


2ND. FLOOR PLAN
Native hard wood.



Estimated cost, ₱8,000.

FIG. 8.



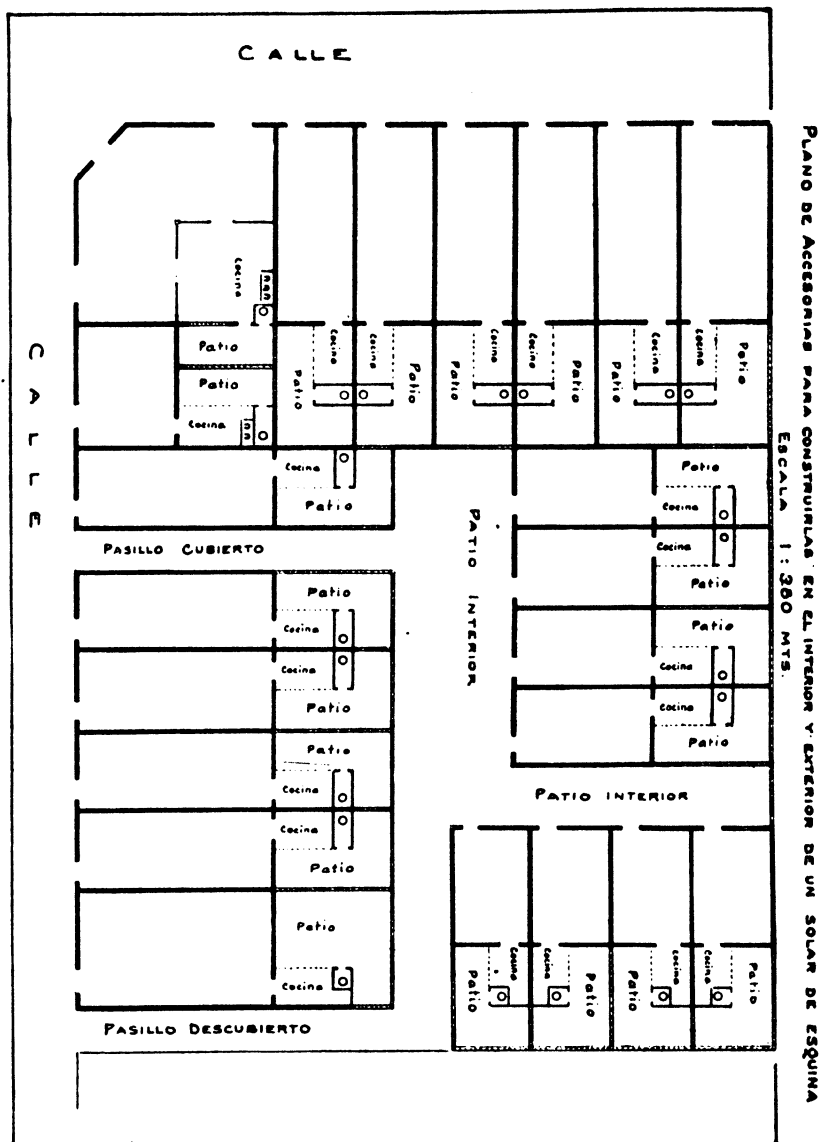


FIG. 9.

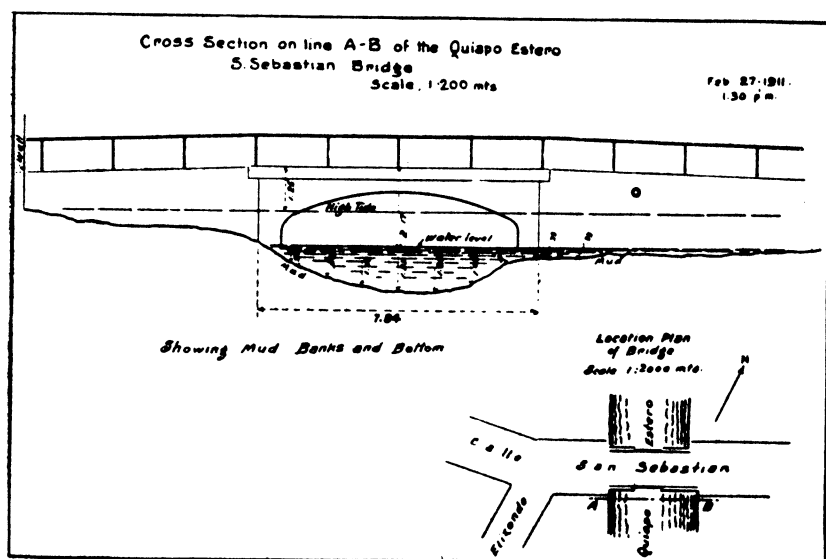
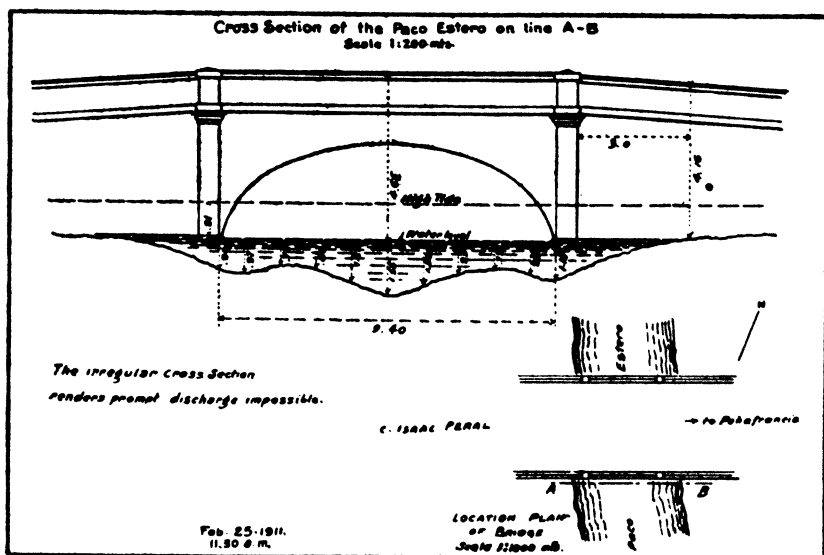
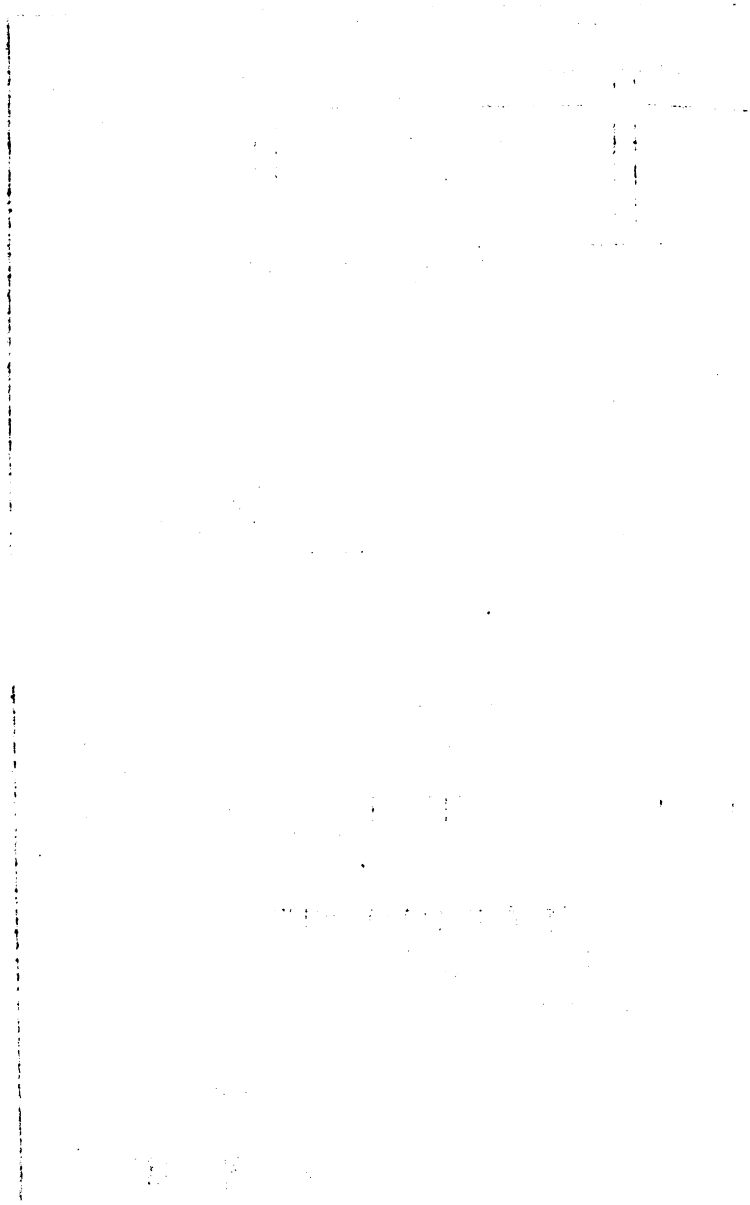


FIG. 10.



CONCLUSION.

The year covered by this report has been characterized by decided progress and success in public health matters.

That epidemics of dangerous communicable diseases will occur in the future may be expected, but the days of panics are over. The Bureau with its organization and experience no longer fears invasions of epidemic diseases. Smallpox can be prevented by vaccination; beriberi can be cured as well as avoided through the use of unpolished rice; cholera can be restricted by proper sanitary measures; plague can be prevented by rat extermination. Thus it will be seen that sanitary measures are available against nearly all diseases that afflict mankind.

The task that confronts the Bureau of Health is a formidable one but since success has been attained in the time gone by under less favorable conditions, there is reason for faith in the possibilities of the days to come. To those through whose loyalty and aid former achievements that have been accomplished are due, the undersigned acknowledges his appreciation for the past and his hopeful reliance for the future.

Respectfully submitted.

CARROLL FOX,

Acting Director of Health,

Passed Assistant Surgeon,

U. S. Public Health and Marine-Hospital Service.

The Honorable the SECRETARY OF THE INTERIOR.

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 3, 1861. It is a very important document, as it contains the President's views on the secession of the Southern States.

2. The second part of the document is a report from the Secretary of the Interior, dated January 10, 1861. It contains information about the land claims of the Southern States, and the President's response to them.

3. The third part of the document is a report from the Secretary of the Treasury, dated January 15, 1861. It contains information about the financial situation of the United States, and the President's response to it.

4. The fourth part of the document is a report from the Secretary of the War, dated January 20, 1861. It contains information about the military situation of the United States, and the President's response to it.

STATISTICAL TABLES

BUREAU OF HEALTH

DIVISION OF STATISTICS

JULY 1, 1910 TO JUNE 30, 1911

GENERAL STATISTICS.

[Unless otherwise stated these statistics are for the fiscal year ended June 30, 1911.]

Population of the city of Manila.

[Health census of 1910.]

Nationality.	Popula- tion.	Nationality.	Popula- tion.
Americans	4,174	Chinese	14,098
Filipinos	211,859	All others	1,276
Spaniards	2,364	Total	224,409
Other Europeans	644		

Marriages.*

	Total mar- riages.	Health districts.					Single males married—			Widowed males married—		
		No. 1.	No. 2.	No. 4.	No. 5.	No. 6.	Single females.	Widowed females.	Divorced females.	Single females.	Widowed females.	Divorced females.
Americans	46	85	5	8	2	—	85	1	8	4	1	—
Filipinos	1,397	180	576	70	508	63	1,164	71	—	106	57	—
Spaniards	1	—	—	—	1	—	1	—	—	—	—	—
Other Europeans	5	2	1	1	1	—	4	—	—	1	—	—
Chinese	48	4	26	1	12	—	32	8	—	6	2	—
All others	2	1	1	—	—	—	1	1	—	—	—	—
Total	1,498	222	609	75	524	63	1,287	76	8	116	60	—

	Divorced males married—			Nationality of bride.						Relation- ship.	
	Single fe- males.	Widowed females.	Divorced females.	American.	Filipino.	Spanish.	Other Euro- peans.	Chinese.	All others.	Blood.	Affinity.
Americans	—	—	1	84	8	—	3	—	—	—	—
Filipinos	—	—	—	—	1,396	1	—	—	—	8	—
Spaniards	—	—	—	—	1	—	—	—	—	—	—
Other Europeans	—	—	—	2	1	—	1	1	—	—	—
Chinese	—	—	—	—	38	—	—	5	—	—	—
All others	—	—	—	—	1	—	—	—	1	—	—
Total	—	—	1	86	1,445	1	4	6	1	8	—

* Registration incomplete.

Average per thousand population 12.73.

*Marriages by age.**

Males.		Females.						
Age.	Number.	To 14 years.	To 20 years.	To 25 years.	To 30 years.	To 40 years.	To 50 years.	Over 50 years.
To 14 years.....								
To 20 years.....	465	1	395	60	6	3		
To 25 years.....	572	1	372	172	23	4		
To 30 years.....	206		98	57	41		2	
To 40 years.....	177		67	40	38	31	1	
To 50 years.....	49		5	6	18	15	5	
Over 50 years.....	24		2	3	2	9	7	1
Total.....	1,493	2	989	338	128	70	15	1

* Registration incomplete.

*Births reported.**

Nationality.	Male.	Female.	Total.	Annual average per 1,000.
Americans.....	69	55	124	29.70
Filipinos.....	4,676	4,281	8,957	42.27
Spaniards.....	20	16	36	16.22
Other Europeans.....	13	9	22	34.16
Chinese.....	21	17	38	1.69
All others.....		3	3	2.35
Total and average.....	4,799	4,381	9,180	39.16

* Registration incomplete.

Births, by districts.

Health districts.	Number of legitimates.			Number of illegitimates.			Grand Total.
	Male.	Female.	Total.	Male.	Female.	Total.	
No. 1, Intramuros.....	543	508	1,051	29	87	66	1,117
No. 2, Melise.....	1,094	986	2,080	99	97	196	2,276
No. 4, Sampaloc.....	862	763	1,625	80	82	162	1,787
No. 5, Tondo.....	1,434	1,315	2,749	64	79	143	2,892
No. 6, Paco.....	583	499	1,082	11	15	26	1,108
Total.....	4,516	4,071	8,587	283	310	593	9,180

Births, by districts, and annual birthrate per 1,000.

Health districts.	Popu- lation.	Births.	Annual rate per 1,000.
No. 1, Intramuros.....	29,744	1,117	37.55
No. 2, Melise.....	82,771	2,276	27.49
No. 4, Sampaloc.....	37,697	1,787	47.40
No. 5, Tondo.....	62,854	2,892	46.38
No. 6, Paco.....	21,843	1,108	50.72
Total and average.....	284,409	9,180	39.16

Births, by districts, according to number of children borne by mother.

Number of births, in the order in which the child was born, whether first child, second child, etc.	Health districts.										Total.	
	No. 1.		No. 2.		No. 4.		No. 5.		No. 6.			
	Liv- ing.	Still born.	Liv- ing.	Still born.	Liv- ing.	Still born.	Liv- ing.	Still born.	Liv- ing.	Still born.	Liv- ing.	Still born.
First.....	819	12	607	16	398	13	635	25	217	9	2,176	75
Second.....	203	11	441	11	376	11	581	16	218	2	1,819	51
Third.....	171	6	377	14	249	8	463	14	176	3	1,496	45
Fourth.....	118	7	263	9	245	16	382	10	162	2	1,170	44
Fifth.....	100	7	182	8	154	6	294	15	107	4	837	40
Sixth.....	61	7	140	5	124	10	178	8	89	3	592	33
Seventh.....	44	2	91	4	63	3	122	6	37	1	377	15
Eighth.....	31	4	57	4	57	1	72	2	36	1	253	12
Ninth.....	17	5	40	6	30	3	44	5	27	2	198	21
Tenth.....	17	4	20	2	33	1	54	3	10	-----	134	10
Eleventh.....	13	1	18	1	21	3	27	2	9	-----	88	7
Twelfth.....	8	-----	13	-----	5	-----	21	1	12	1	59	2
Thirteenth.....	7	1	16	2	4	-----	7	-----	1	1	35	4
Fourteenth.....	3	-----	6	1	2	1	5	1	2	-----	18	3
Fifteenth.....	3	-----	2	2	2	-----	3	-----	1	-----	11	2
Sixteenth.....	-----	-----	1	1	1	-----	1	-----	3	-----	6	1
Seventeenth.....	2	-----	1	-----	2	1	2	-----	-----	-----	7	1
Eighteenth.....	-----	-----	1	-----	-----	-----	-----	-----	-----	-----	1	-----
Nineteenth.....	-----	-----	-----	-----	-----	-----	-----	-----	1	-----	1	-----
Twentieth.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Twenty-first.....	-----	-----	-----	-----	1	-----	-----	-----	-----	-----	1	-----
Twenty-second.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Twenty-third.....	-----	-----	-----	-----	-----	-----	1	-----	-----	-----	1	-----
Total.....	1,117	67	2,276	86	1,787	77	2,892	107	1,106	29	9,180	366

Number of deaths and death rate per 1,000 among residents, by nationalities.

Nationality.	Number of deaths.	Annual average per 1,000.	Nationality.	Number of deaths.	Annual average per 1,000.
Americans.....	47	11.26	Chinese.....	228	16.17
Filipinos.....	7,456	35.19	All others.....	11	8.62
Spaniards.....	42	17.76	Total and average.....	7,788	33.73
Other Europeans.....	4	6.21			

A classified report of all deaths occurring in Manila, including transients.

	Males.	Females.		Males.	Females.
Married.....	876	621	Children.....	2,872	2,456
Divorced.....	1	0	Condition not stated.....	45	25
Widowed.....	272	440	Total.....	4,575	3,704
Single.....	509	162	Grand total.....	8,279	

Stillbirths.....	365
Number of deaths with medical attendance.....	4,500
Number of deaths without medical attendance.....	3,779

Deaths, by age, including transients.

	Resi- dents.	Trans- ients.	Total.		Resi- dents.	Trans- ients.	Total.
Under 30 days.....	924	10	934	40 years to 50 years.....	404	58	462
30 days to 1 year.....	2,969	101	3,070	50 years to 60 years.....	318	34	352
1 year to 2 years.....	578	21	599	60 years to 70 years.....	251	25	276
2 years to 5 years.....	508	14	517	70 years to 80 years.....	196	14	210
5 years to 10 years.....	148	6	149	80 years to 90 years.....	154	5	159
10 years to 15 years.....	68	10	78	90 years to 100 years.....	82	1	83
15 years to 20 years.....	137	20	157	Over 100 years.....	41	1	42
20 years to 25 years.....	214	36	250	Unknown.....	18	3	16
25 years to 30 years.....	261	45	306				
30 years to 40 years.....	687	87	624	Total.....	7,788	491	8,279

Deaths, by districts, including transients.

Health districts.	Popu- lation.	Deaths.	Annual rate per 1,000.
No. 1, Intramuros.....	29,744	1,016	34.15
No. 2, Meisic.....	82,771	1,958	23.65
No. 4, Sampaloc.....	37,697	1,238	34.03
No. 5, Tondo.....	62,354	3,263	52.33
No. 6, Paco.....	21,843	769	34.74
Total and average.....	234,409	8,279	35.31

Comparative mortality from January 1, 1901, to June 30, 1911.

Month.	1901		1902		1903		1904	
	Number of deaths.	Annual death rate per 1,000.	Number of deaths.	Annual death rate per 1,000.	Number of deaths.	Annual death rate per 1,000.	Number of deaths.	Annual death rate per 1,000.
January.....	753	36.25	760	36.58	602	28.98	796	42.64
February.....	689	36.72	706	37.63	511	27.23	709	40.59
March.....	885	42.60	770	37.06	539	25.94	751	40.23
April.....	886	44.07	1,327	66.01	549	27.31	748	41.40
May.....	908	43.47	1,688	81.26	770	37.06	766	41.03
June.....	621	30.89	1,418	70.54	592	29.45	800	44.28
July.....	608	29.27	2,223	107.02	620	33.21	866	46.39
August.....	702	33.79	1,712	82.41	862	46.17	1,032	55.28
September.....	767	38.15	1,132	56.31	1,228	67.97	1,064	58.89
October.....	865	41.16	927	44.62	1,217	65.19	1,018	54.53
November.....	848	42.18	1,085	51.48	874	53.91	957	52.97
December.....	858	41.30	753	36.25	894	47.89	794	42.53
Total.....	9,375	38.30	14,451	59.04	9,358	40.27	10,801	46.83

Month.	1905		1906		1907		1908	
	Number of deaths.	Annual death rate per 1,000.	Number of deaths.	Annual death rate per 1,000.	Number of deaths.	Annual death rate per 1,000.	Number of deaths.	Annual death rate per 1,000.
January.....	685	36.69	737	39.48	632	33.31	1,117	58.87
February.....	608	36.05	595	35.28	473	27.60	733	41.29
March.....	563	30.15	600	32.14	464	24.45	720	37.94
April.....	530	29.33	555	30.72	416	22.65	826	34.09
May.....	526	28.17	600	32.14	462	24.35	633	33.36
June.....	953	32.82	693	38.36	402	21.89	678	36.92
July.....	747	40.01	1,451	77.72	515	27.14	977	51.49
August.....	841	45.05	1,182	63.31	653	34.41	1,148	60.50
September.....	1,013	56.07	885	46.22	768	41.82	1,362	74.17
October.....	850	45.53	684	36.64	877	46.22	991	52.23
November.....	944	52.25	653	36.14	725	39.48	837	45.58
December.....	841	45.05	597	31.98	900	47.43	824	43.42
Total.....	8,741	39.74	9,182	41.74	7,287	32.59	10,646	47.62

Comparative mortality from January 1, 1901, to June 30, 1911—Continued.

Month.	1900		1910		1911	
	Number of deaths.	Annual death rate per 1,000.	Number of deaths.	Annual death rate per 1,000.	Number of deaths.	Annual death rate per 1,000.
January	720	*37.94	729	*36.64	658	*32.82
February	616	*35.94	638	*35.50	586	*29.82
March	618	*32.57	642	*32.26	574	*28.85
April	560	*29.95	594	*30.85	547	*28.40
May	544	*28.67	604	*30.35	609	*30.60
June	552	*30.06	646	*33.55	698	*35.99
July	691	*36.41	799	*40.15		
August	679	*35.78	731	*36.74		
September	649	*35.34	664	*34.48		
October	700	*36.89	705	*35.43		
November	778	*42.37	642	*33.34		
December	839	*44.21	635	*31.91		
Total	7,986	*35.50	8,029	*34.25		

* Death rate computed on population of 244,732 (health department's census).

b Death rate computed on population of 219,941 (official census, 1903).

c Death rate computed on population of 223,542 (health census, 1907).

d Death rate computed on population of 284,409 (health census, 1910).

Mortality compared with same period of previous years.

	First quarter.		Second quarter.		Third quarter.		Fourth quarter.	
	Number of deaths.	Annual death rate per 1,000.	Number of deaths.	Annual death rate per 1,000.	Number of deaths.	Annual death rate per 1,000.	Number of deaths.	Annual death rate per 1,000.
1901	2,827	38.58	2,410	39.52	2,077	33.69	2,561	41.54
1902	2,236	37.07	4,433	72.70	5,067	82.19	2,715	44.04
1903	1,682	27.39	1,911	31.34	2,710	48.91	3,085	55.68
1904	2,256	41.16	2,314	42.22	2,962	58.46	2,769	49.98
1905	1,856	34.24	1,649	30.09	2,601	46.94	2,635	47.56
1906	1,982	35.64	1,848	33.72	3,468	62.59	1,934	34.90
1907	1,569	28.48	1,280	22.98	1,936	34.38	2,502	44.43
1908	2,570	46.14	1,937	34.77	3,487	61.92	2,652	47.09
1909	1,954	35.47	1,646	29.55	2,019	35.85	2,817	41.14
1910	2,009	34.78	1,844	31.57	2,194	37.15	1,982	33.56
1911	1,763	30.52	1,649	31.65				

Number of deaths, with causes, occurring among residents in the city of Manila.

[Stillbirths not included in computing death rate of the city.]

Causes of death.	Ameri- cans.		For- eigners.		Filipinos.		Chi- nese.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
<i>I. General diseases.</i>									
1. Typhoid fever (abdominal typhus)		1	2		27	21			51
3. Relapsing fever						1			1
4. Intermittent fever and malarial cachexia	1				48	40	8		97
4a. Malarial cachexia						6			12
8. Whooping cough		1			2	3			6
9. Diphtheria and croup		1							1
9a. Diphtheria						6			13
10. Influenza	1				27	13			41
12. Asiatic cholera	1			1	82	51	1		136
14. Dysentery	2		3		70	56	1		132
17. Leprosy					10	8			18
18. Erysipelas					6	7			13
19. Other epidemic diseases (beriberi)					799	651	30		1480
20. Purulent infection and septicæmia	1			1	14	5			21
22. Malignant pustule						1			1
23. Rabies						1			1
26. Tuberculosis of the larynx					6	2			8
27. Tuberculosis of the lungs	1	1	4	1	525	458	62		1052
28. Tuberculosis of the meninges	1				29	28			58
29. Abdominal tuberculosis	2			1	21	16			40
30. Pott's disease					1	1			2
32. White swelling					1	1			2

Number of deaths, with causes, occurring among residents, etc.—Continued.

Causes of death.	Americans.		Foreigners.		Filipinos.		Chinese.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
I. General diseases—Continued.									
33. Tuberculosis of other organs	1				1	2			4
34. General tuberculosis					2	10			12
35. Scrofula					2				2
36. Syphilis			1				1		2
38. Gonorrhea (under 5 years)					1				1
39. Cancer and other malignant tumors of the buccal cavity					8	9	1		18
40. Cancer and other malignant tumors of the stomach, liver			3		6	12			21
41. Cancer and other malignant tumors of the peritoneum, intestines, rectum					5	1			6
42. Cancer and other malignant tumors of the female genital organs						8			8
43. Cancer and other malignant tumors of the breast		1		1		3			5
44. Cancer and other malignant tumors of the skin					1	1			1
45. Cancer and other malignant tumors of other organs or of organs not specified					11	1	2		14
46. Other tumors (tumors of the female genital organs excepted)					1				1
47. Acute articular rheumatism			1		7	4			12
48. Chronic rheumatism and gout					8	7			15
49. Scurvy						2			2
50. Diabetes			2	1	2				5
51. Exophthalmic goiter						2			2
54. Anemia, chlorosis					4	3			7
56. Alcoholism acute or chronic			1						1
II. Diseases of the nervous system and of the organs of special sense.									
60. Encephalitis						1			1
61. Simple meningitis					84	37			71
62. Progressive locomotor ataxia				1	1		5		8
63. Other diseases of the spinal cord					3	1			4
64. Congestion and hemorrhage of the brain	2		2	1	46	39	2		92
65. Softening of the brain					2		11		13
66. Paralysis without specified cause					4	4	4		12
67. General paralysis					7	5			12
68. Other forms of mental alienation					8	3	2		13
69. Epilepsy					4	2			6
71. Convulsions (under 5 years)					263	231	3	3	500
72. Tetanus	1				99	76	4	1	181
78. Chorea						1			1
74. Other diseases of the nervous system	1		1		1	1			4
76. Diseases of the ear					2				2
III. Diseases of the circulatory system.									
77. Pericarditis						4			4
78. Acute endocarditis	1				7	6			14
79. Organic diseases of the heart	2		1	1	32	35	23		94
80. Angina pectoris					12	5	1		18
81. Diseases of the arteries (atheroma, aneurism etc.)	1	1	1		6	7	1		19
82. Embolism and thrombosis		1			3	3			7
84. Diseases of the lymphatic system (lymphangitis, etc.)						2	1		3
85. Hemorrhage; other diseases of the circulatory system					1	2			3
IV. Diseases of the respiratory system.									
88. Diseases of the larynx			1			1			2
89. Diseases of the thyroid body						1			1
90. Acute bronchitis		1	3		354	316	1	1	676
91. Chronic bronchitis			1		188	198	14	3	404
92. Broncho-pneumonia	1	1			55	39	1	1	98
93. Pneumonia					38	41	1		80
94. Pleurisy					7	2			9
95. Congestion and apoplexy of the lungs					2	5			7
96. Gangrene of the lungs					1				1
97. Asthma					11	4	2		17
98. Pulmonary emphysema					1	2			3
99. Other diseases of the respiratory system tuberculosis excepted)					3		1		

Number of deaths, with causes, occurring among residents, etc.—Continued.

Causes of death.	Ameri- cans.		For- eigners.		Filipinos.		Chi- nese.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
V. Diseases of the digestive system.									
100. Diseases of the mouth and its adnexa						1			1
101. Diseases of the pharynx					2	1			3
102. Diseases of the esophagus							3		3
103. Ulcer of the stomach					1	2		1	4
104. Other diseases of the stomach (cancer excepted)			1		9	4			14
105. Diarrhea and enteritis (under 2 years)	2				128	105			233
105a. Chronic diarrhea and enteritis (under 2 years)					50	63			113
106. Diarrhea and enteritis (2 years and over)			1	2	75	66			144
107. Intestinal parasites					5	7			12
108. Hernias and intestinal obstructions					14	10			25
110. Acute yellow atrophy of the liver			1		9	8	1		19
112. Cirrhosis of the liver			2		9	4			15
113. Biliary calculi					1	3			4
114. Other diseases of the liver					12	12			24
115. Diseases of the spleen					1				1
116. Simple peritonitis (nonpuerperal)			1	1	6	9			17
117. Other diseases of the digestive system (cancer and tuberculosis excepted)					1	1			2
118. Appendicitis and abscess of the iliac fossa					4	3			7
VI. Diseases of the genito-urinary system and its adnexa.									
119. Acute nephritis	1				16	17			34
120. Bright's disease	1	1	2		45	55	3		107
121. Other diseases of the kidneys and their adnexa						2			2
122. Calculi of the urinary tract					5				5
123. Diseases of the bladder	1				2				3
126. Nonvenereal diseases of the male genital organs							1		1
128. Uterine hemorrhage (nonpuerperal)						2			2
129. Uterine tumor (noncancerous)						2			2
131. Cysts and other tumors of the ovary						2			2
132. Other diseases of the female genital organs				1		1			2
VII. The puerperal state.									
134. Accidents of pregnancy						4			4
135. Puerperal hemorrhage				1		15			16
136. Other accidents of labor						3			3
137. Puerperal septicæmia				1		17			18
138. Puerperal albuminuria and convulsions						6			6
140. Other puerperal accidents—sudden death						2			2
VIII. Diseases of the skin and cellular tissue.									
142. Gangrene					1	2			3
143. Furuncle			1			3			4
144. Acute abscess, phlegmon					3	4	1		8
145. Other diseases of the skin and its adnexa					3				3
IX. Diseases of the organs of locomotion.									
146. Nontuberculous diseases of the bones					11	8	2		21
147. Arthritis and other diseases of the joints (tuberculosis and rheumatism excepted)							1		1
X. Malformations.									
150. Congenital malformations (stillbirths excluded)				1	2	6			9
XI. Early infancy.									
151. Congenital debility, icterus and sclerema		3			355	278	3	5	644
152. Other diseases peculiar to early infancy	1				13	22			36
153. Lack of care			1		8	7	2		18
XII. Old age.									
154. Senile debility			1		118	173	1		293
XIII. External causes.									
155. Suicide by poison								1	1
156. Suicide by asphyxia									
157. Suicide by hanging or strangulation					1		1		2
158. Suicide by drowning					1				1
159. Suicide by firearms	1								1
160. Suicide by cutting instruments			1						1
164. Fractures			1		5	1			7

Number of deaths, with causes, occurring among residents, etc.—Continued.

Causes of death.	Ameri- cans.		For- eigners.		Filipinos.		Chi- nese.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
<i>XIII. External causes—Continued.</i>									
165. Dislocations									
166. Other accidental traumatisms	1				18	4	2		25
167. Burns and scalds	1		1	1	6	7			16
172. Accidental drowning					8	4	3		15
178. Inanition (starvation)									
174. Absorption of deleterious gases (nonsuicidal)									
175. Other acute poisonings	1				1	3			5
176. Other external violence									
<i>XIX. Ill-defined diseases.</i>									
178. Sudden death					1				1
179. Causes of death unspecified or ill defined	2	1			67	52	5		127
Total	32	15	41	16	3,954	3,502	212	16	7,788
Grand total	47		57		7,456		228		7,788

Number of deaths, with causes, occurring among transients in the city of Manila.

[Stillbirths not included in computing death rate of the city.]

Causes of death.	Ameri- cans.		For- eigners.		Filipi- nos.		Chi- nese.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
<i>I. General diseases.</i>									
1. Typhoid fever (abdominal typhus).....		1	2		4				7
4. Intermittent fever and malarial cachexia.....			1		3	4			8
4a. Malarial cachexia.....					1	1			2
8. Whooping cough.....					1				1
9a. Diphtheria.....						2			2
10. Influenza.....					1				1
12. Asiatic cholera.....					10	5	1		16
14. Dysentery.....	1		1		3	6			11
17. Leprosy.....					7	2			9
19. Other epidemic diseases (beriberi).....			1		22	12			35
27. Tuberculosis of the lungs.....	1		4		100	22	3		130
28. Tuberculosis of the meninges.....					1				1
29. Abdominal tuberculosis.....					1	1			2
30. Pott's disease.....						1			1
33. Tuberculosis of other organs.....					1				1
34. General tuberculosis.....		1	1		3	1			6
36. Syphilis.....					1				1
39. Cancer and other malignant tumors of the buccal cavity.....					1		1		2
40. Cancer and other malignant tumors of the stomach and liver.....	1				4	1			6
41. Cancer and other malignant tumors of the peritoneum, intestines, and rectum.....					1				1
42. Cancer and other malignant tumors of the female genital organs.....						4			4
43. Cancer and other malignant tumors of the breast.....						2			2
44. Cancer and other malignant tumors of the skin.....					1				1
46. Cancer and other malignant tumors of other organs or of organs not specified.....			1	1	4	1			7
54. Anæmia, chlorosis.....					1				1
<i>II. Diseases of the nervous system and of the organs of special sense.</i>									
61. Simple meningitis.....			1		3	1			5
62. Progressive locomotor ataxia.....		1							1
64. Congestion and hemorrhage of the brain.....	1				4	2			7
65. Softening of the brain.....							1		1
68. Other forms of mental alienation.....					8	2			5
71. Convulsions (under 5 years).....					10	9			19
72. Tetanus.....					5	3			8

Number of deaths, with causes, occurring among transients, etc.—Continued.

Causes of death.	Amer- icana.		For- eigners.		Filipi- nos.		Chi- nese.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
<i>III. Diseases of the circulatory system.</i>									
78. Acute endocarditis				1					1
79. Organic diseases of the heart.			2	1	6	2	1		12
80. Angina pectoris.						1			1
81. Diseases of the arteries (atheroma, aneurism, etc.)					8	1			4
82. Embolism and thrombosis			1						1
83. Diseases of the veins (varices, hemorrhoids, phlebitis, etc.)		1							1
<i>IV. Diseases of the respiratory system.</i>									
90. Acute bronchitis.					5	6			11
91. Chronic bronchitis					7	8			15
92. Broncho-pneumonia					6	2			8
93. Pneumonia					12	3			15
97. Asthma						1			1
99. Other diseases of the respiratory system (phthisis excepted)					1				1
<i>V. Diseases of the digestive system.</i>									
103. Ulcer of the stomach			1		1				2
104. Other diseases of the stomach (cancer excepted)					2				2
105. Diarrhea and enteritis (under 2 years)					5	4			9
105a. Chronic diarrhea and enteritis (under 2 years)					8	4			7
106. Diarrhea and enteritis (2 years and over)			1		4	2			7
108. Hernias and intestinal obstructions					1	2			4
110. Acute yellow atrophy of the liver	1					1			1
112. Cirrhosis of the liver			1		2	1			4
113. Biliary calculi					4	1			1
114. Other diseases of the liver.			2		4		1		7
116. Simple peritonitis (nonpuerperal)					2	1			3
118. Appendicitis and abscess of the iliac fossa					4				4
<i>VI. Diseases of the genito-urinary system and its adneza.</i>									
119. Acute nephritis					2				2
120. Bright's disease	1				3	3			7
121. Other diseases of the kidneys and their adnexa					3				3
122. Calculi of the urinary tract					1	2			3
125. Diseases of the prostate					1				1
131. Cysts and other tumors of the ovary						1			1
<i>VII. The puerperal state.</i>									
136. Other accidents of labor						1			1
137. Puerperal septicæmia						2			2
138. Puerperal albuminuria and convulsions		1							1
<i>VIII. Diseases of the skin and cellular tissue.</i>									
143. Furuncle					1				1
144. Acute abscess, plegmon					1				1
<i>XI. Early infancy.</i>									
151. Congenital debility, icterus and sclerema	1				2	7			10
153. Lack of care					2				2
<i>XII. Old age.</i>									
154. Senile debility					1	4			5
<i>XIII. External causes.</i>									
164. Fractures					2				2
166. Other accidental traumatisms					4				4
167. Burns and scalds					3	2			5
175. Other acute poisonings	1								1
176. Other external violence					8				8
<i>XIV. Ill-defined diseases.</i>									
178. Sudden death					1				1
179. Causes of death unspecified or ill defined				1	1	1	1		4
Total	8	5	20	4	300	145	9		491
Grand total	13		24		445		9		491

XIII. External causes.

[illegible]

XIV. *Ill-defined diseases.*

179. Causes of death unspecified or ill defined																								
		2		2		1		1		1														
Total	12	2	5	140	118	30	7	1	4	2	145	117	46	8	1	106	92	32	1	6	1	102	80	28
Grand total	14	5	253	30	8	6	262	46	4	10	198	82	1	7	182	28								

Causes of death.

[illegible]

I. General diseases.

[illegible]

Number of deaths by nationality, sex, and age—Continued.

Causes of death.	From 50 upward.						Unknown.						Total.						Grand total.						
	Amer- icans.			Filipinos.			Chi- nese.			Amer- icans.			Chi- nese.			Amer- icans.				Filipinos.			Chinese.		
	M. F. M. F. M. F.			M. F. M. F. M. F.			M. F. M. F. M. F.			M. F. M. F. M. F.			M. F. M. F. M. F.			M. F. M. F. M. F.				M. F. M. F. M. F.					
	M.	F.		M.	F.		M.	F.		M.	F.		M.	F.		M.	F.		M.	F.		M.	F.		
<i>V. Diseases of the digestive system—Continued.</i>																									
115. Diseases of the spleen.....																									1
116. Simple peritonitis (nonpuerperal).....																									20
117. Other diseases of the digestive system (cancer and tubercu- losis excepted).....																									2
118. Appendicitis and abscess of the iliac fossae.....																									11
<i>VI. Diseases of the genito-urinary system and its adnexa.</i>																									
119. Acute nephritis.....																									36
120. Bright's disease.....	1	2																							114
121. Other diseases of the kidneys and their adnexa.....																									8
122. Calculi of the urinary tract.....																									6
123. Diseases of the bladder.....	1																								2
124. Diseases of the prostate.....																									2
125. Nonvenereal diseases of the male genital organs.....																									2
126. Uterine hemorrhage (nonpuerperal).....																									1
127. Uterine tumor (noncancerous).....																									2
128. Cystitis and other tumors of the ovary.....																									2
129. Cystitis and other tumors of the ovary.....																									2
130. Other diseases of the female genital organs.....																									2
<i>VII. The puerperal state.</i>																									
134. Accidents of pregnancy.....																									4
135. Puerperal hemorrhage.....																									16
136. Other accidents of labor.....																									4
137. Puerperal septicæmia.....																									4
138. Puerperal albuminuria and convulsions.....																									19
140. Other puerperal accidents—sudden death.....																									6
<i>VIII. Diseases of the skin and cellular tissues.</i>																									
142. Gangrene.....																									2
143. Furuncle.....																									2
144. Acute abscess, phlegmon.....																									8
145. Other diseases of the skin and its adnexa.....																									4

Infant mortality.

Causes of deaths.	Mother milk.		Wet nurses.		Other milk.		Not milk.		Mixed.		Under 30 days without alimentation.	Not stated.		Total.
	Under 30 days.	From 30 days to 1 year.	Under 30 days.	From 30 days to 1 year.	Under 30 days.	From 30 days to 1 year.	Under 30 days.	From 30 days to 1 year.	Under 30 days.	From 30 days to 1 year.		Under 30 days.	From 30 days to 1 year.	
Abscess	1													1
Acute yellow-atrophy of the liver		1				1								2
Anemia, malnutrition													1	1
Asphyxia											8	1		9
By compression of cord											1			1
Due to prolonged labor											1	1		4
Atelectasis		1									2			2
Bacillus coli communis infection														1
Beriberi	46	1,058		2	2	61			2	19		2	86	1,278
Endocarditis		1										1		2
Myocarditis						1								1
Bronchitis:														
Acute	15	376			1	70				12		2	81	507
Pneumonia													1	1
Capillary		10				2							1	13
Chronic		122				58				11		10		201
Chronic and enteritis		1												1
From Influenza													1	1
Subacute		2												2
Broncho-pneumonia	1	22		1	1	8							8	41
Acute		1												1
Chronic colitis						1								1
Diphtheria and stomatitis													1	1
Cholera		2				2							1	5
Colitis:														
Chronic						1								1
Chronic and lobular pneumonia													1	1
Congenital atelectasis														1
Congenital debility	238	88	1		55	56	15		2	3	92	59	4	563
Congenital debility and enteritis, chronic						1								1
Congenital debility and icterus	1													1
Congenital heart disease												1		1
Congenital heart disease and chronic parenchymatous nephritis													1	1
Congenital malformation of cord		1									1			2
Congenital osteomalacia													1	1
Congenital strangulated hernia												1		1
Convulsions (acute dyspepsia)													1	1
Convulsions:														
Caused by whooping cough													1	1
Infantile	93	287			17	61			1	5	1	10	24	499
Due to difficult dentition													1	1
Due to intense gastralgia													1	1
Probably due to parasites of intestines						1								1
Debility and anemia from premature separation of placenta											1			1
Dentition													1	1
Diarrhea and enteritis		3				8								11
Chronic		1				3								4
Dilatation of heart		1												1
Diphtheria													1	1
Dysentery:														
Acute		1			1	6				1			4	13
Amebic						1								1
Bacillary						1								1
Chronic						1								1
Dyspepsia:														
Acute													1	1
Gastro-intestinal										1				1
Eclampsia, infantile													2	2
Eczema, chronic		2												2
Empyema sinistra, broncho-pneumonia, laryngitis, furunculosis, ulcerative stomatitis													1	1
Encephalitis		1												1
Enteritis:														
Acute		15			2	23						1	3	44
Chronic		6				12				2			6	26
Subacute		1				1								2
Enterocolitis						1				1				2
Chronic						1								1

Causes of deaths.	Mother milk.		Wet nurse.	Other milk.	Not milk.		Mixed.	Under 30 days without alimentation.	Not stated.		Total.
	Under 30 days.	From 30 days to 1 year.	Under 30 days. From 30 days to 1 year.	Under 30 days. From 30 days to 1 year.	Under 30 days. From 30 days to 1 year.	Under 30 days. From 30 days to 1 year.	Under 30 days. From 30 days to 1 year.		Under 30 days. From 30 days to 1 year.		
Epilepsy.....		1									1
Erysipelas.....	2	3									5
Due to umbilical infection.....	1										1
Genital organs and thigh.....		1									1
Furunculosis.....		1									1
Gastritis:											
Acute.....		1									1
Chronic.....					1						1
Gastro-enteritis:											
Acute.....		24			33						69
With broncho-pneumonia.....								4		1	6
Chronic.....		2			4			1			8
With malnutrition.....										1	1
Subacute.....										1	1
With bronchitis.....					2			1			3
Influenza.....		8			1					6	15
With myocarditis.....		1									1
Hemophilia.....										1	1
Hemorrhagia neonatorum.....	1	1				1				7	10
Hemorrhage:											
Of cord.....	2			2						4	8
Of right cerebellum.....										1	1
Icterus.....	29	11			4			1		1	46
Catarrhal.....					1						1
Icterus neonatorum.....	3			1	1					1	6
And enteritis, acute.....										1	1
Imperforate anus and intestinal obstruction.....										1	1
Inanition.....		1								1	2
With broncho-pneumonia.....										1	1
Infantile convulsions, high fever of infectious character (<i>Coli bacillaria</i>).....										1	1
Intermittent fever.....	1	3			1						7
Jaundice.....					3						3
Lobular pneumonia.....		1			1						2
Malarial cachexia.....		1									1
Malnutrition.....					1	13		1		2	20
And broncho-pneumonia.....										1	1
Marasmus.....		20			97			10		2	129
And gastro-enteritis, chronic.....					1						1
And malnutrition.....					1						1
Meningitis and abscess of hip.....		1									1
Meningitis:											
Acute.....	1	17			4		1		1	8	28
Cerebral.....		6			1						6
Cerebro-spinal.....		2			1						3
Simple, of gastro-intestinal origin.....											1
Nephritis:											
Acute.....		7			3					7	17
Chronic.....		2			1			1			4
Chronic and difficult dentition.....										1	1
Nonclosure foramen ovale.....	1										2
Obstruction, intestinal.....		1			1						2
Organic lesion of heart (fatty degeneration).....		1									1
Atrepsia.....		3			23			3		2	39
Pericarditis, purulent.....											1
Peritonitis, acute, broncho-pneumonia.....										1	1
Phlegmon of left side and erysipelas.....		1									1
Pneumonia.....		12			6			1			25
Septic.....										1	1
Premature baby and congenital debility.....									2	1	3
Premature birth.....	1								4	4	9
Pulmonary congestion.....	1										1
Purulent bronchitis.....		1									1
Purulent infection.....		1									1
Rickets.....		2			6						1
Scurvy.....											1

Infant mortality—Continued.

Causes of deaths.	Mother milk.		Wet nurse.		Other milk.		Not milk.		Mixed.		Not stated.		Total.
	Under 30 days.	From 30 days to 1 year.	Under 30 days.	From 30 days to 1 year.	Under 30 days.	From 30 days to 1 year.	Under 30 days.	From 30 days to 1 year.	Under 30 days.	From 30 days to 1 year.	Under 30 days.	From 30 days to 1 year.	
Sepsis and inflammation of cord		1									1		1
Sepsis (etiology unknown)											1		1
Septicemia and gastro-enteritis					1						1		1
Septicemia due to cord infection											1		1
Septicemia, neonatorum					1						1		2
Septicemia, probably (furunculosis)												1	1
Spina bifida		1											1
Status lymphaticus					1								1
Tetanus due to abscess	1												1
Tetanus, umbilical	129				4						21	1	155
Tuberculosis:													
Bronchial		1							1				2
Disseminated		2			1								3
Of the lungs		1			4							8	13
Of the meninges		15	1		2							2	20
Tubercular pneumonia												1	1
Typhoid fever					1								1
Umbilical infection		1											1
Undetermined	1	2							1	1	1		6
Urethritis, acute	1												1
Whooping cough					1								1
With broncho-pneumonia, acute.					1								1
Total	570	2,114	1	4	88	604	16	1	5	82	117	137	4,004

Deaths, by occupations.

Occupation.	Number.		Occupation.	Number.	
	Males.	Females.		Males.	Females.
Professional:			Personal services, police and military:		
Architects, artists, teachers of art, etc.	4		Barbers and hairdressers	14	1
Clergymen, priests, nuns, etc.	12	4	Janitors and sextons	17	
Engineers and surveyors	1		Policemen, watchmen, and detectives	12	
Journalists			Soldiers, sailors, and marines	7	
Lawyers	3		Others of this class	5	
Musicians and teachers of music	10		Laboring and servant:		
Nurses and midwives		8	Laborers (not agricultural)		
Physicians and surgeons	2		Launderers	11	187
Teachers (schools)	6	4	Servants	57	38
Others of this class	6		Manufacturing and mechanical industry:		
Clerical and official:			Artificial flower and paper-box makers		
Bookkeepers, clerks, and copyists	112		Bakers and confectioners	2	
Bankers, brokers, and officials of companies	4		Blacksmiths	5	
Collectors, auctioneers, and agents	8		Boot, shoe, and slipper makers	9	
Stenographers and typewriters			Brewers, distillers, and rectifiers		
Telegraph and telephone operators			Butchers	4	2
Others of this class	1	1	Cabinetmakers and upholsterers		
Mercantile and trading:			Carpenters and joiners	91	
Apothecaries, pharmacists, etc.	3		Cigar maker and tobacco workers	30	64
Commercial travelers	1	1	Clock and watch repairers	13	
Merchants and dealers	54	4	Compositors, printers, etc.	9	2
Hucksters and peddlers	2	2	Coopers		
Shopkeepers	18	60	Embroiderers (gold, silk, etc.)	2	
Others of this class	2		Engineers and firemen (not locomotive)	28	9
Public entertainment:			Glass blowers and glass workers	1	
Hotel and boarding-house keepers			Hat and cap makers	8	
Saloon keepers, liquor dealers, bartenders, and restaurant keepers	2		Iron and steel workers		
			Leather makers		
			Leather workers	5	
			Machinists	7	

Deaths, by occupations—Continued.

Occupation.	Number.		Occupation.	Number.	
	Males.	Females.		Males.	Females.
Manufacturing and mechanical industry—Continued.			Agriculture, transportation, and other outdoor—Continued.		
Marble and stone cutters	8		Gardeners, florists, nurserymen, etc.	2	
Masons (brick and stone)	18		Livery-stable keepers and hostlers	1	
Mill and factory operatives (textiles)		2	Lumbermen and raftsmen	3	
Millers (flour and grist)			Miners and quarrymen		
Milliners			Sailors, pilots, fishermen, and oystermen	70	4
Painters, glaziers, and varnishers	23		Steam railroad employees	3	
Plumbers, gas and steam fitters	2		Stock raisers, herders, and drovers		1
Tailors, dressmakers, and seamsters	31	142	Others of this class	6	
Tinners and tinware makers	8		All other occupations	80	34
Others of this class	29	8	Total	1,527	535
Agriculture, transportation, and other outdoor:			Grand total	2,062	
Boatmen and canalmen	19				
Draymen, drivers, and teamsters	48				
Farmers, planters, and farm laborers	57	2			

Bilibid prison report of sick.

Diseases.	Remaining at last report.	Admitted.	Died.	Discharged.	Remaining.	Diseases.	Remaining at last report.	Admitted.	Died.	Discharged.	Remaining.
Abortion, accidental		3		3		Bronchitis:					
Abscess	10	50		60		Acute	5	74		78	1
Alveolar		3		3		Chronic	8	37		45	0
Foot		3		3		Bubo		1		1	
Gluteal region		1		1		Burns		2		2	
Ischio-rectal		7		7		Bunions		1		1	
Left arm		1		1		Burns with carbolic acid		3		3	
Lungs		2		2		Callosities		1		1	
Leg		3		2	1	Cancer of liver		1	1		
Thigh		1		1		Carbuncle, back of neck		2		2	
Perineal		1		1		Carcinoma of rectum	1			1	
Adenitis	1	2		3		Carcinoma of stomach		1		1	
Axillary, tubercular		1		1		Cataract		1		1	
Axillary, suppurative		1		1		Chancroids		1		2	
Cervical, tubercular		2		1	1	Chancroid, glans penis		2		1	1
Inguinal, venereal		3		3		Cholelithiasis		2		1	1
Alcoholism		1		1		Cholera morbus		1		1	
Amebiasis	1	254	1	237	17	Circumcision		4		4	
Amblyopia		1		1		Colic:					
Amputation:						Hepatic		8		4	
Fifth toe, right foot		1		1		Intestinal	1	7		7	
Fourth and fifth fingers, right foot		1		1		Renal		1		1	
Of finger		2		1	1	Colitis, acute		8		8	
Fourth finger, left hand		1		1		Congestion, pulmonary		20		19	1
Anemia	1	1		2		Conjunctivitis		5		5	
Ankylostomiasis	6	757		752	11	Constipation	4	45		47	2
Aortic and mitral stenosis		1		1		Contusions		18		15	
Aortic aneurysm		1		1		Contusion, right side of chest		1			1
Aortic stenosis		2		2		Coryza, acute		6		6	
Appendicitis:						Cyst:					
Chronic, recurrent		3		3		Dermoid		1		1	
Acute, suppurative, and septic peritonitis		1	1			Sebaceous		4		4	
Recurrent		4		4		Cystitis, acute		3		3	
Appendectomy		1		1		Cellulitis of left great toe		1		1	
Arterio-sclerosis		5		2	3	Cellulitis of left leg		2		2	
Arthritis, purulent	1	1		1		Cerebral hemorrhage		1	1		
Ascites		1		1		Conjunctivitis:					
Asthma	2	19		21		Right, suppurative		1			1
Asthma, bronchial		9		7	2	Traumatic		5		5	
Balanitidum coli infection		2		2		Dengue fever		9		8	
Balanitis		8		8		Dhobie itch		1		1	
Beriberi	4	5		8	1	Diarrhea	1	8		9	
Blindness		1		1							

Bilibid prison report of sick—Continued.

Diseases.	Remaining at last report.	Admitted.	Died.	Discharged.	Remaining.	Diseases.	Remaining at last report.	Admitted.	Died.	Discharged.	Remaining.
Dislocation of finger		1		1		Iritis		1		1	
Dysentery:						Keratitis		1			1
Acute		5		5		Locomotor ataxia		1			1
Amebic		29		29		Laryngitis:		1			1
Catarrhal		2		2		Acute, catarrhal		2		2	
Dyspepsia		12		12		Tuberculous		1		1	
Eczeema, chronic		1		1		Leprosy		5		4	1
Eczeema		2		2		Suspect, proven negative		2		2	
Elephantiasis	1	1		2		Lipoma	1	3		4	
Empyema		3		2	1	Lipoma of knee	1	1		1	
Enteritis:						Lumbago		4		4	
Acute		1		1		Lymph scrotum		1		1	
Catarrhal		2		2		Lymphadenitis, chronic	1			1	
Esophagismus, and pulmonary and intestinal tuberculosis		1	1			Lipoma, ischio-rectal fossa		1		1	
Exostosis, left humerus		1		1		Liver, multiple cysts of, cause undetermined	1	1			
Epithelioma of esophagus		1	1			Malaria, tertian		2		2	
Febricula		1		1		Malarial fever	3	45		48	
Fibroma		3		3		Malarial splenomegalia		2		2	
Filaria		1		1		Malarial cachexia		1			1
Fistula:						Malingering		1		1	
Anal	3	16		18	1	Menopause		1		1	
Submaxillary		1		1		Migraine		2		2	
Foreign body in arm		1		1		Mitral insufficiency		6		5	1
Fracture of femur	1			1		Mitral regurgitation	1	1		2	
Fracture:						Mitral stenosis		1		1	
Lower third, right tibia		1		1		Morphinism	16	253		254	16
Outer third, left clavicle		2		2		Myalgia		1		1	
Furunculosis		6		6		Myocarditis	1			1	
Fever, undetermined		1		1		Nasal polypus		1		1	
Fibroma:						Necrosis of sternum		1			1
Coccygeal region		1		1		Necrosis of right tibia		1		1	
Left forearm		1		1		Nephritis:					
Foreign body imbedded in right cornea		1		1		Chronic		1			1
Fracture of left tibia		1		1		Purulent, acute		1	1		
Fracture of upper third, left radius		1		1		Neuralgia		1		1	
Gastralgia	1	14		15		Neurasthenia		4		4	
Gastritis:						Neurosis		1		1	
Acute		4		4		Necrosis of the third right rib, syphilitic		1			1
Chronic		5		3	2	Necrosis of the palate, syphilitic		1			1
Recurrent		1		1		Onychia		1		1	
Gastro-enteritis:						Opiumism	17	205		213	9
Acute		3		3		Orchitis		4		4	
Chronic		1		1		Gonorrheal		1		1	
Gingivitis		1		1		Otitis media, suppurative		1			1
Gonorrhea		1		1		Paragomiasis	1	1		2	
Grippe		2		2		Paraplegia	2	6		5	3
Furuncle of eyelid		2		2		Parotitis		179		177	2
Furuncle of leg		1		1		Parturition		2		2	
Furunculosis:						Pericarditis, septic, and pneumonia, septic		1	1		
Back of neck		1		1		Peritonitis:					
Of the scalp		1		1		Acute		1	1		
Helminthiasis	13	761		766	8	Septic		1	1		
Hematoma		1		1		Acute		5		5	
Hemiplegia	1			1		Pleurisy	3	15		18	
Hemoptysis		3		3		Acute, fibrinous		5		4	1
Hemorrhoids	5	9		14		Pneumonia:					
Hemorrhoids, internal		9		8	1	Acute, lobar		1	1		
Hepatic cirrhosis		1		1		Broncho	1	14	4	11	
Hernia	3	11		14		Lobar	2	19	4	16	1
Inguinal		22	1	18	3	Pott's disease		1			1
Inguinal, strangulated		2		2		Pregnancy	1	6		7	
Herpes	1			1		Prolapse of rectum		1		1	
Hydrocele	2	27		29		Pterygium, right eye		1		1	
Hysteria	1	6		7		Rheumatism	2	9		10	1
Intestinal catarrh, chronic		1		1		Articular		6		6	
Infected left leg		1		1		Muscular		11		9	2
Infected right index finger		1		1		Ringworm		1		1	
Ingrowing toe nail		1		1		Scabies		2		2	
Indigestion	1	5		6		Scalds, foot		1		1	
Infected arm, vaccination		2		2		Scintica		3		3	
Infected foot		5		4	1	Senile tremor of hands		1		1	
Influenza		18		18		Senility		5		5	2
Insanity	1	17		18		Staphylooma	1			1	

Bilibid prison report of sick—Continued.

Diseases.	Remaining at last report.	Admitted.	Died.	Discharged.	Remaining.	Diseases.	Remaining at last report.	Admitted.	Died.	Discharged.	Remaining.
Stomatitis		2	2			Tumor, keloid		1	1		
Strain, inguinal		1	1			Ulcers	2	2	2		2
Stricture of rectum		1	1			Urethritis		1	1		
Stricture of urethra		2	2			Gonorrheal		1	1		
Supernumerary digit (thumb)		1	1			Urticaria		1	1		1
Syphilis	5	20	23	2		Varicella	2	15	18		1
Syphilis and yaws		1	1			Varicocele		2	2		
Tachycardia		1	1			Varicoid		25	25		
Tenia		14	14			Vaccination		1	1		
Tinea circinata		1	1			Wounds	20	20	20		
Tinea imbricata, chronic		1	1			Wound, foot		1	1		
Tonsillitis, gonorrheal		1	1			Wounds:					
Traumatic stricture of nostrils		1	1			Right thigh, gunshot		1	1		
Traumatism right leg		1	1			Lacerated scalp and arm		1	1		
Tuberculosis:						Toes, left foot		1	1		
Acute, miliary		2	2			Fourth toe, left foot		1	1		
General		1	1			Finger, right hand		1	1		
Generalized empyema of left lung		1	1			Small left toe		1	1		
Of foot		1	1			And fracture of first right phalanx		1	1		
Of rectum		1	1			Contused, scalp		1	1		
Of testicle		5	5	2		Yaws	1	2	2		
Pulmonary	152	88	62	49	129	Under observation		108		97	8
Tarsal bone of right foot		1	1			Undetermined		4		4	
Intestinal		1	1			Total	303	3,694	89	3,649	250

Bilibid Prison report of deaths.

Diseases.	Presidio, Filipino.		Carcel.						Condition.					Norte Cemetery.
			Americana.		Filipino.		Chinese.		Total.	Married.	Single.	Widowed.	Unknown.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.						
Amebiasis	1								1	1				1
Aortic and mitral stenosis	1								1	1				1
Aortic aneurism	1								1			1		1
Appendicitis, acute, suppurative, and septic peritonitis					1				1	1				1
Cancer of the liver	1								1	1				1
Cerebral hemorrhage			1						1		1			1
Epithelioma of esophagus	1								1	1				1
Esophagismus, and pulmonary and in- testinal tuberculosis	1								1	1				1
Hernia, inguinal	1								1	1				1
Liver, multiple cysts of, cause undeter- mined	1								1	1				1
Melancholia, acute							1		1		1			1
Nephritis, parenchymatous, acute	1								1	1				1
Pericarditis, septic, and pneumonia					1				1			1		1
Pericarditis, acute					1				1	1				1
Peritonitis, septic	1								1				1	1
Pneumonia:														
Acute, lobar	1								1		1			1
Broncho	3				1				4	1	1	2		4
Lobar	1				3				4	1	2		1	4
Tuberculosis:														
General	1								1	1				1
Generalized empyema of left lung	1								1					1
Miliary	2								2	2				2
Of lungs	59				2		1		62	32	27	3		62
Legally executed					3				3	5	3			3
Total	78		1		17		2		98	53	96	7	2	98

Died in Bilibid Hospital, 89; Legally executed, 8; Died in San Lazaro Hospital, 1. Total, 98.

Iwakig penal colony sick report.

Diseases.	Remaining at last report.	Admitted.	Died.	Discharged.	Remaining.	Diseases.	Remaining at last report.	Admitted.	Died.	Discharged.	Remaining.
Abscess:						Intestinal parasites, as-					
Alveolar		3		2	1	carials		1		1	
Anal		2		1	1	Iritis		1		1	
Axillary		2		2		Keratitis, interstitial		1		1	
Face		2		2		Laryngitis, acute	1			1	
Foot	10	9		9	1	Lithiasis, biliary		1		1	
Gluteal region		3		3		Malaria	10	1,000		1,004	6
Hand		2		2		Malaria and pneumonia		2	1	1	
Head		3		3		Malaria and neuritis		1		1	
Ischio-rectal		1		1		Malaria, estivo-autumnal		8		8	
Mammary		1		1		Malarial cachexia		17		17	
Popliteal region		1		1		Myalgia		3		1	2
Scrotal		1		1		Myocarditis		4	1	3	
Adenitis, axillary	1	1		2		Nephritis:					
Amebiasis		2		1	1	Acute and endocarditis		1		1	
Ankylostomiasis		4		4		Acute		7		7	
Anthrax	2	4		6		Chronic		3		3	
Apoplexy, cerebral		1	1			Neuralgia		3		3	
Arthritis, rheumatic		3		3		Occlusion, intestinal		3		3	
Atrophic cirrhosis of liver		1		1		Orchitis		1		1	
Atrophy, muscular, chronic	1			1		Paragonimiasis	1			1	
Bite, insect		1		1		Parotitis		1		1	
Bronchitis:						Peritonitis:					
Acute		14		14		Acute		2	2		
Chronic	1	1		2		Acute, general		1	1		
Broncho-pneumonia and endocarditis		1		1		Pleurisy		3		3	
Cardiac dilatation		1	1			Pleurodynia		1		1	
Cephalalgia		1		1		Pulmonary edema		1		1	
Conjunctivitis:						Pulmonary hemorrhage		1		1	
Acute, catarrhal		1		1		Purpura		1		1	
Simple		5		5		Rheumatism	1	30		31	
Constipation		5		5		Senile debility		1	1		
Contusions		17		17		Senile dementia		1		1	
Contusion:						Sprain without dislocation					
Of gluteal region		1		1		Stomatitis		1		1	
Foot		5		5		Submersion accidental		1	1		
Head		1		1		Syncope		1		1	
Pulmonary		2		2		Syphilis	1			1	
Spine		2		2		Tonsillitis		1		1	
Degeneration of heart		1	1			Tuberculosis, abdominal		1	1		
Dermatitis:						Tuberculosis, pulmonary	15	53	12	41	15
Herpetiform		1		1		Tumor of ear		1		1	
Diarrhea		5		5		Tumor of testicle		1		1	
Dislocation, maxillary		1		1		Ulcer of foot	3	6		9	
Dysentery		2		2		Ulcer of hand		1		1	
Amebic	1	4		5		Ulcer of skin		1		1	
Eczeema		2		2		Under observation		179		177	2
Enteritis		6		6		Wounds:					
Enucleation of eye		1		1		Foot	3	70		72	1
Epilepsy, syphilitic		2	1	1		Hand	1	21		21	1
Erysipelas	1			1		Head		2		2	
Fatty degeneration of heart after hemoglobinuria						Head, and contusion of chest		1		1	
Fistula, anal		3		3		Leg		1		1	
Fracture:						Contused, with fracture of third phalanx of finger					
Of skull		1		1		Contused—					
Complete, forearm		1		1		Face		2		2	
Furuncle	1	1		2		Foot		3		1	2
Gastralgia		1		1		Forearm	2			2	
Gastritis		1		1		Hand		3		3	
Acute	1	7		8		Head		1		1	
Gastro-enteritis		1		1		Infected—					
Hemoglobinuria		8		3		Arm		1		1	
Hemoglobinuria and pneumonia		1	1			Face		1		1	
Hemorrhoids		1		1		Foot		4		4	
Hepatic congestion		7		7		Hand		2		2	
Hepatitis		7		7							
Herpes	1	2		3		Total	50	1,632	28	1,621	33
Hypertrophic cirrhosis of liver	1	1		2							

Report of San Lazaro Hospital, insane and leper departments.

INSANE DEPARTMENT.

Status.	Amer- icana.		Euro- peans.		Filipinos.		Chinese.		Others.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
In hospital at last report	2	1	1		188	24	3		3		172
Admitted	49	1	5		86	85	2		2		180
Discharged	42	1	3		24	15			4		89
Transferred	1		1		1						3
Escaped					4						4
Died	1				10	6	2				19
Remaining	7	1	2		186	87	8		1		237

LEPER DEPARTMENT.

In hospital at last report	1				116	49					166
Admitted	1		2		257	120	14				394
Discharged			1		9	4	13				27
Discharged, not leprosy					87	28	1				66
Transferred	1				194	69					264
Escaped					14	1					15
Died	1				17	6					24
Remaining			1		102	61					164

CULION LEPER COLONY DIVISION.

Remaining at last report			3		1,017	660	1				1,681
Admitted	1		1		732	384	1				1,069
Born					18	19					37
Escaped, returned					7						7
Died					297	130					427
Escaped					45	1					46
Discharged			1		2	1					4
Remaining	1		3		1,490	881	2				2,317

Chinese Hospital sick report.

[Dr. Tee Han Kee, physician in charge.]

Status.	Number, males.	Total.
In hospital at last report	19	19
Received	235	235
Discharged	136	136
Transferred	1	1
Died	85	85
Remaining in hospital	82	82

Report of prescriptions filled at the Central Free Dispensary.

Health districts.	Americans.				For- eign- ers, adults, male.	Filipinos.				Chi- nese, adults, male.	Total.
	Adults.		Children.			Adults.		Children.			
	Male.	Fe- male.	Male.	Fe- male.		Male.	Fe- male.	Male.	Fe- male.		
No. 1, Intramuros	2,002	1,219		4	48	6,611	5,016	1,466	1,279	6	17,646
No. 2, Meisic	91		1		14	1,559	1,392	593	328	8	3,981
No. 4, Sampaloc	21	1			1	2,086	1,300	1,653	971		6,083
No. 5, Tondo	30				1	1,081	991	321	242	1	2,617
No. 6, Paco	5					421	383	381	301		1,491
Province (Rizal)						12					12
Total	2,149	1,220	1	4	59	11,720	9,082	4,414	3,121	10	31,760

Report of sick and wounded poor attended by municipal physicians.

Health districts and physicians.	Americans.		Foreigners.			Filipinos.			
	Adults, male.	Children, male.	Adults.		Children, male.	Adults.		Children.	
			Male.	Female.		Male.	Female.	Male.	Female.
No. 1, Intramuros, Dr. V. Cavanna	12	1	82	1	-----	1,433	1,424	580	568
No. 2, Meisic, Drs. F. Herrera and C. Reyes	18	-----	8	-----	1	443	221	208	162
No. 4, Sampaloc, Dr. F. Castañeda	-----	-----	1	-----	-----	586	949	795	816
No. 5, Tondo, Drs. V. Pantoja and P. Gabriel	2	1	-----	-----	-----	1,360	1,015	948	633
No. 6, Paco:	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dr. J. B. Cabarrús	-----	-----	-----	-----	-----	298	327	195	160
Dr. Tee Han Kee	3	-----	-----	-----	-----	35	31	13	11
Total	35	2	41	1	1	4,155	3,967	2,739	2,350

Health districts and physicians.	Chinese.			Total.	Cured.		Deaths.		Number of visits.
	Adults, male.	Children.			Male.	Fe- male.	Male.	Fe- male.	
		Male.	Fe- male.						
No. 1, Intramuros, Dr. V. Cavanna				4,051	920	868	29	23	10,176
No. 2, Meisic, Drs. F. Herrera and C. Reyes	51			1,112	555	302	13	10	4,877
No. 4, Sampaloc, Dr. F. Castañeda	2			3,149	207	260	79	85	3,917
No. 5, Tondo, Drs. V. Pantoja and P. Gabriel	12			3,971	655	409	42	21	7,228
No. 6, Paco:									
Dr. J. B. Cabarrús				980	279	249	39	16	2,666
Dr. Tee Han Kee	338	17	1	449	289	33	3		1,857
Total	403	17	1	13,712	2,905	2,121	205	155	30,721

San Lazaro Morgue report.

Disposition.	Number of bodies.	Disposition.	Number of bodies.
Remaining from last year	1	Received—continued:	
Received:		Typhoid fever	5
Amputated leg	2	Violence	10
Beriberi	2	Other diseases	349
Cholera	152	Total	655
Collection of bones	1		
Death from burning	1	Dropped:	
Diphtheria	15	Buried by Bureau of Prisons	1
Drowning	1	Buried by city	445
Gangrene (one leg)	1	Buried by family	174
Hydrophobia, suspected	1	Cremated	27
Leprosy	22	Transferred to Philippine Medical School	8
Leprosy, suspected	1	Remaining after the year	0
Pulmonary tuberculosis	43	Total	655
Rabies	1		
Stillborn	30		
Tetanus	16		
Traumatic shock	1		

Number of autopsies held, 222.

Disposition of dead bodies.

Dispositon.	Number.	Disposition.	Number.
Buried:		Buried—continued:	
Norte cemetery	5, 248	Santa Ana cemetery	171
Paco cemetery	290	Chinese cemetery	250
Santa Cruz cemetery	83	San Pedro Macati cemetery (Eng-	
Binondo cemetery	294	lish)	4
Balibalic cemetery	1, 149	Otherwise disposed of:	
Maytubig cemetery—		Cremated	21
San Marcelino	45	Transferred to the provinces	69
Ermita	202	Remaining in the Philippine	
San Fernando de Dilao	90	Medical School	10
Singalong cemetery	50	Remaining in City Morgue	15
Malate cemetery	372	Remaining in private morgues	2
Pandacan cemetery, Roman Cath-		Embalmed for shipment	15
olic	62	Preserved in alcohol (fetuses)	6
Pandacan cemetery, Filipino			
Church	141	Total	*8, 689

* In this total are included 365 stillbirths and 20 dead bodies brought from the provinces; also 21 bodies left from the Philippine Medical School and 4 of Santo Tomas University last year.

Disinterments.

Cemeteries.	Number.	Cemeteries.	Number.
Balibalic	28	Pandacan	1
Binondo	8	Santa Ana	1
Chinese	87	Santa Cruz	208
Loma	3	Tondo	3
Malate	7		
Norte	4	Total	466
Paco	118		

General inspection of houses, premises, vaults, etc., with improvements ordered, whitewashed, cleaned, etc., by medical inspectors, sanitary inspectors, and assistant sanitary inspectors.

1. Inspections of houses by sanitary inspectors	47,317
2. Reinspections of houses for verification of work ordered	2,871
3. Inspections of houses by assistant sanitary inspectors and sanitary policemen	1,012,534
4. Reinspections of houses by assistant sanitary inspectors and sanitary policemen	341,272
5. Houses ordered cleaned (written)	42
6. Houses ordered cleaned (verbal)	209,559
7. Houses cleaned	209,559
8. Houses ordered whitewashed and painted	952
9. Houses whitewashed and painted	755
11. Number of houses recommended condemned and removed	5,174
12. Number of houses condemned and removed	12
13. Number of localities where "squatters" are located	0
14. Number of samples of water, foods, etc., sent to Laboratory	7,118
15. Number of reports for same	4,383
16. Number of fire-plugs opened or closed for sanitary purposes	0
17. Number of hydrants recommended reopened	0
18. Number of houses where garbage has not been removed for two days	23
19. Number of persons reported sick to Municipal Physicians	17,540
20. Cesspools and vaults ordered cleaned	36
21. Cesspools cleaned	21
22. Yards ordered cleaned	158,171
23. Yards cleaned	158,171
24. Yards ordered repaired (repaved, etc.)	49
25. Yards repaired	1

26. Number of cholera cases reported by Sanitary Inspectors.....	116
27. Number of cholera cases found alive.....	139
28. Number of cholera cases found dead.....	90
29. Number of orders issued during the year.....	430
30. Number of orders complied with during the year.....	307
31. Number of orders awaiting action.....	52
32. Number of orders pending in court.....	2
33. Average number of food tiendas in the districts.....	2,044
34. Number of persons convicted for violation of food prohibition orders.....	169
35. Average number of regular inspectors on duty.....	49
36. Average number of regular emergency inspectors on duty.....	25
37. Number of leprosy cases sent to San Lazaro Hospital.....	161
38. Number of plague cases reported.....	0
39. Number of smallpox cases reported (varioid included).....	209
40. Average number of houses in which traps were set.....	928
41. Average number of houses in which bane was placed.....	0
42. Average number of traps set.....	1,831
43. Average number of plates with bane placed.....	0
44. Rats caught by rat catchers.....	3,000
45. Rats caught by traps.....	4,333
46. Rats caught by poison.....	37
47. Rats found dead.....	48
48. Average number of rat catchers employed.....	14
49. Number of persons vaccinated during the year.....	35,221

Report of disinfections.

Causes for disinfections.	Number of disinfections.	Number of contacts.	Causes for disinfections.	Number of disinfections.	Number of contacts.
Anthrax.....	1	-----	Hemorrhagic pancreatitis.....	1	1
Beriberi.....	3	-----	Infection, colibacillary.....	1	-----
Bronchitis.....	1	7	Insanitary condition.....	3,816	181
Bronchitis, subacute.....	1	4	Leprosy.....	120	472
Cancer.....	1	-----	Leprosy and tuberculosis.....	1	-----
Carcinoma of tongue, etc.....	1	-----	Leprosy, suspected.....	13	51
Cholera.....	156	3,036	Marasmus, puerperal septi-	1	-----
Cholera:			cemia.....		
Suspected.....	92	1,384	Measles.....	39	162
Vibrio carrier.....	4	29	Meningitis.....	5	13
Cockroaches.....	2	-----	Tuberculous.....	3	13
Convulsions.....	4	-----	Mosquitos, larvæ.....	40	-----
Diarrhea and enteritis.....	2	-----	Nephritis, chronic.....	1	-----
Diphtheria.....	29	253	Organic heart disease.....	1	-----
Suspected.....	7	38	Perforated ulcer, duodenum.....	1	-----
Dysentery.....	21	54	Pleuro-pneumonia of cattle.....	2	-----
Amebic.....	1	-----	Pneumonia.....	3	-----
Bacillary.....	5	18	Rabies.....	3	-----
Chronic.....	1	-----	Rinderpest.....	1	-----
Enteritis.....	8	44	Septicemia.....	1	-----
Acute, dysentery form.....	1	-----	Surgical infection.....	1	-----
Chronic.....	-----	30	Syphilis.....	4	1
Subacute.....	2	19	Tetanus.....	11	10
Enterocolitis, chronic.....	1	-----	Ticks.....	1	-----
Erysipelas.....	5	2	Tuberculosis.....	305	71
Exhumations.....	466	3	Typhoid fever.....	38	296
Fever, colibacillary.....	2	-----	Undetermined.....	5	26
Flies.....	10	-----	Unknown.....	1	9
Foot-and-mouth disease.....	1	-----	Varicella.....	86	518
Gastritis.....	1	-----	Variola.....	1	8
Gastro-enteritis.....	14	49	Varioid.....	108	628
Gastro-enteritis and bronchi-	1	-----	Suspected.....	3	20
tis.....			Vermin.....	3	-----
Gastro-enteritis, chronic.....	3	13	Whooping cough.....	5	6
Glanders.....	7	-----	Yaws.....	1	1
Gonorrhea.....	1	-----			
Grave, disinterred body.....	1	-----			
Grippe.....	2	4			
			Total.....	5,490	7,474

*Report of disinfectants received and expended during fiscal year ending
June 30, 1911.*

RECEIVED.

	Corrosive sub- mate (kilos).	Copper sulphate, (kilos).	Potassium permanganate (kilos).	Sulphur, (kilos).	Lime chloride (kilos).	Lime, rock (sacks).	Acid, carbolic, cry- stal (drums).	Jeye's fluid (lit- ers).	Kreco (liters).	Formalin (liters).	Alcohol (liters).	B. H. Form No. 51 (sheets).
Balance on hand from fiscal year 1909-1910 at Station A, Melsic.	1	5	10	200		3	1.0			5	1	88
Received during fiscal year 1910- 1911 from:												
Station A, Melsic.	10	5	10		74	30.0	1,456	20	182	32	800	
Station J	20	40	50	200		28	528	13	11	62		
Station C		5	2		8		25		25	1		
Station I		8					6.0		5			
Total	31	15	65	250	200	108	59.0	2,009	33	228	96	888

EXPENDED.

Expended during fiscal year 1910-1911.	19,380	5	36	30	100	97	54.5	1,184	5	200	94	399
Balance on hand July 1, 1911 at:												
Station A	1,620	10	19	200		1	2.0	75	20	25	1	
Station J	10,000		10	20	100	10	2.5		8	3	1	489
Total balance on hand July 1, 1911	11,620	10	29	220	100	11	4.5	75	28	28	2	489

Report of cremations at Palomar crematory.

Animals cremated.	Number.	Animals cremated.	Number.
American horses	4	Fowls	2,441
Australian horses	4	Goats	63
Bears	1	Leopards	1
Bulls	54	Native ponies	28
Calves	4	Pigs	614
Carabao	20	Rats	809
Cats	570	Sharks	1
Cows	22	Sheep	4
Deer	2		
Dogs	323	Total	4,956

Refuse cremated.	Cartloads.	Refuse cremated.	Cartloads.
Condemned goods	906	Slops	1,209
Fire refuse	86	Trade refuse	3,354
Lumber	2	Miscellaneous	8
Market refuse	1,513		
Rubbish	1,108	Total	6,184

Report of operations of the jail-conservancy system.

PAIL COLLECTIONS.

Where cleaned.	Number of instal- lations.	Number of instal- lations in use.	Pails in use.	Pails cleaned.
Private houses.....	5,548	1,708	2,141	798,947
Public buildings.....	150	58	314	108,106
Midden sheds.....	195	170	2,064	708,288
Military buildings.....	31	5	26	12,658
Total.....	5,919	1,941	4,545	1,617,999

CLEANED BY ODORLESS EXCAVATORS.

Where cleaned.	Vaults cleaned.	Loads removed.	Gallons removed.
Private houses.....	2,311	8,500	1,709,500
Public buildings.....	30	121	60,500
Insular Bureaus.....	5	40	20,000
Military buildings.....	2	6	8,000
Total.....	2,348	3,667	1,798,000

Report of action taken on applications for licenses.

Kind of license applied for.	Ap- proved.	Disap- proved.	Total acted upon.	Kind of license applied for.	Ap- proved.	Disap- proved.	Total acted upon.
Liquor:				Boil and sell tallow.....	1		1
First-class bars.....	63	2	65	Stock yards.....	2		2
Second-class bars.....	56	4	60	Dairies.....	7		7
First-class bars and restaurants.....	33		33	Auctioneers.....	5		5
Second-class bars and restaurants.....	6		6	Boarding stables.....	4	2	6
Groceries.....	81	2	83	Grocery stores.....	16		16
Druggists.....	16		16	Native pastries and gela- tines.....	12		12
Theaters.....	9		9	Second-hand furniture.....	9		9
Wholesale.....	50		50	Fruits and vegetables.....	1	1	2
Hotels.....	21	1	22	Dry and sell fish.....	34	1	35
Restaurants.....	856	142	998	Tannery and sell leathers.....	12		12
Lodging houses.....	35	1	36	Cinematographs.....	11	1	12
Boarding houses.....	82	1	83	Skating rinks.....	3		3
Clubs.....	44		44	Race tracks.....	1		1
Billiard and pool tables.....	84	1	85	Undertakers.....	6	1	7
Bowling alley.....	1		1	Embalmers.....	1		1
Dance halls.....	12	2	14	Mercantile and collect- ing agencies.....	2	1	3
Barber shops.....	478	19	497	Breweries.....	1		1
Native wines.....	2,462	91	2,553	Pawnbrokers.....	3		3
Cooked foods, fruits, veg- etables, soft drinks, and bakery products.....	2,824	193	3,017	Fresh and smoked meats.....	1		1
Bakeries.....	16		16	Shipping offices.....	1		1
Livery stables.....	138	13	151	Master plumbers.....	3		3
Manufactories.....	271	28	299	Aerated water.....	2		2
Laundries.....	34	8	37	Bill posting and street advertising.....	2		2
Distilleries.....	10		10	Theaters.....	7		7
Ice cream.....	42	4	46	Ice water.....	5		5
Tattooers.....	23		23	Boil and sell fresh un- tainted fat and lard.....	1		1
Ferryboats.....	14		14	Cake and candies.....		1	1
Dyeing.....	16	1	17	Gelatine and pastries.....	1		1
Junk shops.....	46	1	47	Two additional automo- biles.....	1		1
Slot machines.....	4		4				
Shooting galleries.....	6		6				
Employment agencies.....	8		8				
Fresh milk.....	1		1				
				Total.....	7,997	517	8,514

Report of lepers living in the Philippine Islands.

	Race.	Number.		Children.		Single.		Married.		Widowers.	Widows.	Total.
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.			
Culion leper colony	(*)	1,486	881	258	137	557	315	549	327	72		2,317
San Lazaro Hospital	(*)	103	61	5	6	38	15	53	33	7	7	164
Moro Province	Filipinos.											25
Total		1,589	942	263	143	595	330	602	360	79	109	2,506

* Americans, 1; Europeans, 3; Filipinos, 2,311; Chinese, 2. Total, 2,317.

* Americans, 0; Europeans, 1; Filipinos, 163; Chinese, 0. Total, 164.

Reports received of insane persons living in the various provinces of the Philippine Islands.

Provinces.	Race.	Number.		Children.		Single.		Married.		Widowers.	Widows.	Total
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.			
Abra	Filipino	28	18			22	8	6	3		7	46
Agusan	do	3	2			2	1	1	1			5
Albay	do	43	50			31	33	9	10	3	7	93
Ambos Camarines	do	73	63	5	2	44	24	16	13	8	14	136
Antique	do	51	84	1		33	16	16	13	1	5	85
Bataan	do	19	16			11	6	5	3	3	7	35
Batanes	do	11	12			10	11	1			1	22
Batangas	do	60	53	1		41	35	18	7	5	11	113
Bohol	do	202	171	8		161	143	27	10	6	8	378
Bulacan	do	37	36		1	24	19	8	10	5	6	73
Cagayan	do	13	12			10	7	1	5	2		25
Capiz	do	50	57	3	1	33	23	12	14	2	19	107
Cavite	do	35	33			23	14	8	10	9	9	68
Cebu	do	179	120	1		148	98	25	15	5	7	299
Hospicio de San José	(*)	49	47									96
Ilocos Norte	Filipino	81	26			61	16	17	6	3	4	107
Ilocos Sur	do	126	85	3	8	96	40	19	22	8	15	211
Iloilo	do	57	59	2	3	33	30	12	9	5	17	116
Isabela	do		2				1				1	2
Laguna	do	28	34			21	15	3	7	4	12	62
Lepanto-Bontoc	do	20	21	4	1	14	10	2	7		3	41
Leyte	do	48	38	1		33	24	8	8	1	6	86
Masbate	do	5	4			4	3	1	1			9
Mindoro	do	9	7			8	4	1	2		1	16
Misamis	do	60	36		1	42	24	13	8	5	3	96
Nueva Ecija	do	36	27	1	2	30	15	3	7	2	3	63
Nueva Vizcaya	do	9	7		1	5	3	3	2	1	1	16
Occidental Negros	do	71	35	2		47	21	12	9	10	5	108
Oriental Negros	do	71	43			56	35	11	5	4	3	114
Pampanga	do	38	41			27	16	10	14	1	11	79
Pangasinan	do	124	84	1	2	64	38	47	32	12	17	208
Rizal	do	48	25	10		16	14	15	5	7	6	73
Romblon	do	11	4			4	2	4	2	3		15
Samar	(*)	19	8		1	14	3	4	3	1	1	27
San Lazaro Hospital	Filipino	199	38			93	12	86	16	20	10	237
Sorsogon	do	76	72	2	4	55	42	17	14	2	12	148
Surigao	do	11	2			6		3	2	2		13
Tarlac	do	15	8	1		7	5	6	3	1		23
Tayabas	do	114	93	4	3	84	59	20	21	6	10	207
Union	do	39	31	1	4	20	17	14	7	4	3	70
Zambales	do	11	15			10	7	1	3		5	26
Total		2,179	1,569	51	34	1,453	909	475	330	151	249	3,748

* Europeans, 9; Filipinos, 87. Total, 96.

* Americans, 8; Europeans, 2; Filipinos, 223; Chinese, 3; others, 1. Total, 237.

Reports received of blind persons living in the various provinces of the Philippine Islands.

Provinces.	Race.	Number.		Children.		Single.		Married.		Widowers.	Widows.	Total.
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.			
Abra	Pilipino	25	31	2		10	6	10	9	3	16	56
Agusan	do	10	5		1	7	3	3	1			15
Albay	do	86	63	12	6	42	41	28	8	4	8	149
Ambos Camarines	do	86	70	7	9	28	30	35	8	16	23	156
Antique	do	45	38	2	3	23	15	16	8	4	12	83
Bataan	do	19	17	1		12	9	5	4	1	4	36
Batanes	do	13	31	1	1	3	8	7	4	2	18	44
Batangas	do	73	45	4		29	22	34	13	6	10	118
Bohol	do	155	121	18	1	79	85	45	17	13	18	276
Bulacan	do	65	65	4	7	29	28	28	11	4	19	130
Cagayan	do	27	27	2		11	5	8	6	6	16	54
Capiz	do	105	85	2	3	36	30	52	18	15	34	190
Cavite	do	78	53	9	7	31	19	23	13	15	14	181
Cebu	do	73	47	8	4	37	18	17	12	11	13	120
Ilocos Norte	do	37	41	2		5	10	23	7	7	24	78
Ilocos Sur	do	105	90	11	5	42	29	34	26	18	30	195
Iloilo	do	38	95	7	4	39	40	22	17	20	34	183
Isabela	do	4	4		1	1		1		2	3	8
Laguna	do	57	37	9	3	30	13	12	9	6	12	94
Leyte	do	79	33	7	1	44	17	18	6	10	9	112
Marbato	do	13	8	1	1	8	5	2		2	2	21
Misamis	do	64	42	6	4	39	17	10	11	9	10	106
Mountain	do	49	32									81
Nueva Ecija	do	47	34	7	2	11	11	22	5	7	16	81
Nueva Vizcaya	do	9	3			5	2	2	1	2		12
Occidental Negros	do	99	66	9	4	52	34	12	8	26	20	165
Oriental Negros	do	44	28	2		24	17	14	6	4	5	72
Pampanga	do	125	120	11	10	64	54	31	16	19	40	245
Pangasinan	do	106	93	9	6	43	34	35	25	19	28	199
Risal	do	91	62	5	4	33	28	37	12	16	18	158
Romblon	do	13	5	1		4	3	7		1	2	18
Sorsogon	do	189	107	28	18	123	70	30	10	8	9	296
Surigao	do	24	5	2		10	1	10	2	2	2	29
Tarlac	do	29	27	5	1	10	10	6	6	8	10	56
Tayabas	do	70	47	9	2	32	19	22	10	7	16	117
Union	do	38	36	6	3	17	11	8	9	7	13	74
Zambales	do	20	19	1	1	9	4	6	3	4	11	39
Total		2,260	1,732	210	112	1,022	748	675	321	304	519	3,992

Summary of operations of Baguio Hospital, referred to on page of annual report.

Cases remaining from fiscal year, 1910	19
Cases admitted during fiscal year 1911	542
Total number of hospital cases during the year	561
Total number of hospital cases remaining June 30, 1911	36
Total number of persons accompanying patients in hospital	25
Total new cases outdoor department (persons attending hospital clinic)	3,429
Total number visits to hospital clinic	5,038
Total number of prescriptions filled	5,909
Total number surgical dressings (hospital clinic)	2,061
Total number major operations	17
Total number minor operations	270
Number of prostitutes examined	140
Number of laboratory examinations	992
Number of vaccinations:	
At hospital	147
In subprovince of Benguet	9,375
Total vaccinations	9,522
Number of examinations for enlistment (Constabulary), discharge, etc	10

Hospital cases treated in Baguio Hospital, fiscal year 1911.

MEDICAL CASES.

Diagnosis.	Americans.	Filipinos.	Chinese.	Europeans.	Japanese.	Total.	Diagnosis.	Americans.	Europeans.	Filipinos.	Chinese.	Japanese.	Total.
Alcoholism:							Mental derangement			1			1
Acute	4		1		1	6	Mitral and aortic insufficiency			1			1
Delirium tremens	2					2	Mumps	1	23				24
Anemia		1				1	Nephritis, acute, parenchymatous			1	1		2
Angina pectoris	1					1	Neurasthenia	2					2
Bronchitis, acute	1		14		15	16	Neuritis, acute, catarrhal			1			1
Broncho-pneumonia acute		1				1	Nostalgia and biliousness	1					1
Cholecystitis, chronic	1					1	Ophthalmia neonatorum	1		1			1
Conjunctivitis:							Otitis media, acute, suppurative, (mastoiditis)			1			1
Acute			2			2	Parasites, intestinal:						
And keratitis, acute			1			1	Ascariasis		1				1
Constipation, acute	2		4			6	Ankylostomiasis		1				1
Coryza	2		5			7	Pemphigus contagiosa	1		1			2
Cystitis, acute (Keloid, hand)			1			1	Pharyngitis, chronic	1					1
Debility, post-operative	1					1	Phlebitis, femoral, acute			1			1
Dengue fever			1			1	Pleurisy, acute			1			1
Dhobie itch			1			1	Pneumonia:						
Dysentery, amebic, acute	4		4		5	13	Bronchial, acute	1					1
Enteritis:							Lobar, acute			14			14
Acute—							Poisoning (bichloride of mercury)			1			1
Catarrhal	7		16		2	25	Ptomaine poisoning			2			2
Ankylostomiasis	2					2	Renal calculus	1					1
Ascariasis			1			1	Rheumatism:						
Chronic, catarrhal			2			2	Articular, acute	2		4			6
Enterocolitis, acute			2			2	Gonorrheal	1					1
Epilepsy			1			1	And acute endometritis			1			1
Epistaxis			1			1	Muscular, acute			4			4
Gastritis:							Splenomegaly (malarial)	1					1
Acute	4		7			11	Sprue	2	1				3
Ascariasis			5			5	Syphilis:						
Alcoholic	1					1	Secondary	1		2			3
Chronic	1	1				2	Tertiary	2					2
Gastro-enteritis:							Tonsillitis, follicular, acute			1			1
Acute	2		1			3	Tuberculosis:						
Bronchitis, acute			1			1	Pulmonary—						
Malnutrition and ascariasis			1			1	Acute	3		12			15
Hemorrhagic disease of the newborn			1			1	Chronic			1			1
Hysteria			1			1	And laryngeal	1					1
Influenza	2					2	Millary, acute			1			1
Indigestion, intestinal, acute				1		1	Typhoid fever		1				1
Insanity			1			1	And pneumonia			1			1
Laryngitis acute	1					1	Ulcer, gastric	1		1			2
Malaria:							Under observation	2		18			15
Estivo-autumnal	3		19		1	23	Varicella			44			44
Pneumonia			1			1	Yaws			20			20
Tertian	8	1	26	1	4	40							
Pneumonia			1			1							
Malnutrition, rachitis and intestinal parasites			1			1	Total	72	6	284	2	14	378
Malnutrition, acute bronchitis and ascariasis			1			1	Persons accompanying patients	8		21		1	25
Measles			2			2							

Hospital cases treated in Baguio Hospital, fiscal year 1911—Continued.

SURGICAL CASES.

Diagnosis.	Americans.	Europeans.	Afro-Americans.	Filipinos.	Chinese.	Japanese.	Total.
Abrasions:							
Face				2	2		
Leg				1	1		
And contusions—							
Feet				1	1		
Multiple	1						
Abscess:							
Heel				2	2		
Inguinal				1	1		
Knee				1	1		
Parotid				1	1		
Pectoral muscle				1	1		
Retro-perineal				1	1		
Submaxillary					1	1	
Thigh				1	1		
Adenitis:							
Cervical—							
Acute				1	1		
Tuberculous				1	1		
Epitrochlear and axillary				1	1		
Inguinal, acute				1	1		
Gonorrheal, suppurative				1	1	2	
Suppurative				2	2		
Suppurative, sub-maxillary, femoral, acute				1	1		
Amputation, forearm				1	1		
Appendicitis, acute, catarrhal (appendectomy)	1					1	
Arm, crushed, amputation				1	1		
Brain, concussion of				2	2		
Burns:							
Face and eyes				1	1		
Foot				1	1		
Leg, by corrosive substance				1	1		
Carbuncle				1	1		
Carcinoma of breast, recurrent	1						
Circumcision	3						3
Contusion:							
Chest				1	1		
Jaw				1	1		
Knee				1	1		
Knee and ankle	1						
Multiple	1			1	1		2
Contusion and abrasion, knee and elbow	1						1
Contusions and wounds:							
Multiple				1	1		
Multiple (sprained ankle)				1	1		
Crushed finger (amputation)				1	1		
Crushed foot				2	2		
Cyst, sebaceous, thigh	2						2
Cystitis suppurative, retention of urine, malaria, gonorrheal stricture, (cystotomy and urethrotomy, perineal)				1			1
Dislocation, elbow: multiple contusions and abrasions				1			1
Dynamite injury, eye				2	2		
Ectropion				1	1		
Epididymitis, acute, gonorrheal				1	1	2	3
Fistula, fecal (laparotomy)	1						1
Fistula in ano				1	1		
Fracture:							
Compound, tibia; fracture, fibula				1	1		1
Colles'				1	1		1
Femur				1	1		1
Humerus, compound				1	1		1
Humerus, at elbow (old case)				1	1		1
Metatarsal, compound				2	2		2
Pott's, compound	1						1
Radius				1	1		1
Skull				1	1		1
Tibia				1	1		1
Tibia (old)				1	1		1
Toes, compound				1	1		1
Furuncle	2						2
Goiter:							
Colloid (thyroidectomy, partial)				1	1		1
Cystic (thyroidectomy)				1	1		1
Hemorrhoids:							
External, excision of	1						1
Internal				2	2		2
Hernia:							
Inguinal				1	1		1
Oblique, herniotomy	1						1
Infection:							
Finger				3	3		3
Foot				6	6		6
Hand				1	1		1
Thumb (lymphangitis, hand and arm)	1						1
Osteomyelitis:							
Acute, suppurative				1	1		1
Chronic, suppurative, jaw (resection)				1	1		1
Periostitis, acute				1	1		1
Plastic operation, fingers				1	1		1
Scabies, secondary infection				3	3		3
Sprain:							
Ankle	5						5
Ankle and wrist	1						1
Ankle (lacerated wound, leg)				1	1		1
Knee	1						1
Thumb				1	1		1
Wrist (infected wound, leg)				1	1		1
Synovitis, knee.				1	1		1
Verrucae, multiple.				1	1		1
Wounds:							
Contused, neck				1	1		1
Firearm, kneejoint				1	1		1
Incised—							
Abdomen, arm, and leg				1	1		1
Forehead and face	1						1
Hands (contusions, multiple)				1	1		1
Leg				2	2		2
Head, neck, and arms				2	2		2
Neck and back				1	1		1
Infected—							
Arm				1	1		1
Finger (amputation)				1	1		1
Foot				3	3	1	4
Forehead				1	1		1
Legs				2	2	1	3
Thumb				1	1		1

Hospital cases treated in Baguio Hospital, fiscal year 1911—Continued.

SURGICAL CASES—Continued.

Diagnosis.	Americans.	Europeans.	Afro-Americans.	Filipinos.	Chinese.	Japanese.	Total.	Diagnosis.	Americans.	Europeans.	Afro-Americans.	Filipinos.	Chinese.	Japanese.	Total.
Wounds—Continued.								Wounds—Continued.							
Lacerated—								Punctured—							
Eyelid (contusion, eye)					1	1		Foot			1	1			2
Finger				1		1		Foot, infected				1			1
Fingers (finger amputated)				1		1		Stab, chest				1			1
Fingers and thumb				2		2		Total	23	4		6	100	8	7143
Hand				1		1									

GYNECOLOGICAL AND OBSTETRICAL CASES.

Diagnosis.	Americans.	Europeans.	Afro-Americans.	Filipinos.	Chinese.	Japanese.	Total.
Abortion, accidental				1			1
Bartholinitis, suppurative				1			1
Dysmenorrhea				1			1
Endometritis, chronic laceration of cervix (curettage and trachelorrhaphy)	1						1
Hemorrhage, post-partum				1			1
Parturition	4	1		4			9
Pregnancy	1						1
Pruritus vulvæ				1			1
Puerperal septicæmia				1		1	1
Uterus, fibroma of				1			1
Hysterectomy				1			1
Vaginitis, chronic, gonorrhæal						2	2
Total	6	1	0	11	0	8	21

OUTDOOR DEPARTMENT (HOSPITAL CLINIC).

Diagnosis.	Number of cases.	Diagnosis.	Number of cases.
Abortion:		Acne rosacea	2
Accidental	2	Acne vulgaris	13
Threatened	1	Adenitis:	
Abrasions:		Axillary	4
Ankle	2	Cervical	4
Arm	1	Cervical, tuberculous	2
Ear	1	Inguinal, simple	1
Face	5	Inguinal, suppurative, acute, gonorrheal	5
Foot	7	Submaxillary	1
Finger	7	Adenoids, hypertrophy of	1
Forehead	4	Alcoholism, acute	3
Hand	11	Alopecia	12
Knee	3	Amenorrhea	1
Leg	24	Anemia	21
Thigh	1	Appendicitis, chronic	3
Toe	2	Arterio-sclerosis	2
Abcesses:		Arthritis, chronic	1
Abdominal wall	2	Asthma	7
Alveolar	6	Asthma	6
Back	2	Beriberi	6
Cheek	1	Blepharitis, chronic	3
Ischio-rectal	2	Bronchitis, acute	384
Leg	1	Bronchitis, chronic	14
Lip	1	Burns:	
Mammary gland	1	Arm	3
Meibomian gland	1	Arm and face	1
Neck	2	Face	2
Parotid	2	Face (carbolic acid)	1
Rectal	1	Face and chest	1
Thigh	2		

Hospital cases treated in Baguio Hospital, fiscal year 1911—Continued.

OUTDOOR DEPARTMENT (HOSPITAL CLINIC)—Continued.

Diagnosis.	Number of cases.	Diagnosis.	Number of cases.
Burns—Continued.		Fractures—Continued.	
Fingers.....	1	Rib.....	2
Foot.....	1	Scapula.....	1
Hand.....	3	Furunculosis.....	48
Head.....	1	Gastric hyperacidity.....	12
Leg.....	2	Gastritis:	
Carbuncle.....	1	Acute.....	139
Cephalalgia.....	25	Chronic.....	41
Cervix, erosion of.....	1	Gastro-enteritis, acute.....	6
Chancroid.....	7	Gingivitis.....	7
Circumcision.....	3	Hematoma, ankle.....	1
Conjunctivitis:		Hematuria.....	1
Acute.....	102	Hemorrhoids:	
Chronic.....	9	External.....	11
Follicular, acute.....	6	Internal.....	1
Constipation:		Hernia:	
Acute.....	212	Inguinal.....	2
Chronic.....	111	Umbilical.....	2
Contusions:		Herpes labialis.....	6
Ankle.....	1	Herpes zoster.....	2
Arm.....	1	Hordeolum.....	5
Back.....	1	Icterus, catarrhal.....	2
Chest.....	6	Icthyosis.....	6
Elbow.....	3	Impetigo contagiosa.....	6
Eye.....	1	Impacted cerumen.....	7
Finger.....	1	Indigestion, intestinal:	
Foot.....	3	Acute.....	3
Hand.....	3	Chronic.....	2
Hip.....	1	Infection:	
Knee.....	4	Arm.....	1
Leg.....	2	Face.....	1
Sacrum.....	1	Finger.....	3
Shoulder.....	6	Foot.....	11
Thigh.....	1	Hand.....	6
Toe.....	1	Heel.....	1
Convulsions.....	2	Knee.....	1
Coryza.....	110	Lip.....	4
Cyst:		Nose.....	6
Melbomian.....	2	Scrotum.....	2
Sebaceous.....	7	Toe.....	2
Infected.....	2	Inoculation, gonococcus vaccine.....	2
Cystitis, acute.....	22	Inoculation, rabie serum.....	2
Dengue fever.....	2	Insomnia.....	26
Dental caries.....	48	Laryngitis, acute.....	28
Dermatitis, undetermined.....	26	Leucorrhea.....	3
Dhobie itch.....	28	Lumbago.....	41
Diarrhea:		Malaria.....	225
Acute.....	163	Menorrhagia.....	6
Chronic.....	1	Migraine.....	2
Dislocation:		Miliaria.....	1
Metacarpo-phalangeal.....	1	Mitral insufficiency.....	1
Thumb.....	1	Myalgia.....	59
Wrist.....	1	Nephritis, chronic.....	1
Dysentery, amebic.....	13	Neuralgia:	
Dysmenorrhea.....	7	Intercostal.....	11
Ears, plastic operation of.....	1	Trifacial.....	3
Eczema, acute.....	10	Neurasthenia.....	46
Eczema, chronic.....	13	Neuritis:	
Emphysema and chronic bronchitis.....	1	Brachial.....	2
Endometritis, chronic.....	2	Cardiac (nicotine).....	2
Entero-colitis, acute.....	1	Optic.....	2
Enuresis.....	2	Osteomyelitis:	
Epididymitis, acute, gonorrheal.....	5	Acute, suppurative.....	1
Epilepsy.....	1	Finger.....	1
Epistaxis.....	2	Leg.....	1
Eye strain.....	2	Otitis media:	
Extraction of needle (abdomen).....	1	Acute.....	1
Fissure in ano.....	1	Suppurative.....	9
Fistula in ano.....	1	Chronic.....	4
Fistula, fecal.....	1	Parasites, intestinal:	
Foreign body in eye (removed).....	7	Ascaris.....	22
Foreign body in finger (removed).....	1	Oxyuris.....	1
Fractures:		Tenia saginata.....	1
Acromion process.....	1	Paronychia.....	1
Finger.....	3	Paraphimosis.....	1
Nose.....	1	Parotitis, acute.....	1
Radius.....	2	Parturition.....	1

Hospital cases treated in Baguio Hospital, fiscal year 1911—Continued.

OUTDOOR DEPARTMENT (HOSPITAL CLINIC)—Continued.

Diagnosis.	Number of cases.	Diagnosis.	Number of cases.
Pediculosis pubis.....	6	Urethritis—Continued.	
Pemphigus contagiosa.....	6	Chronic.....	13
Periostitis, acute.....	2	Urine, incontinence of.....	1
Pertussis.....	2	Urticaria.....	17
Pharyngitis:		Uterus, retro-displacement of.....	1
Acute.....	30	Vaccinia.....	7
Chronic.....	8	Vaginitis:	
Pleurisy, acute.....	3	Acute.....	1
Pregnancy.....	5	Chronic, gonorrheal.....	3
Vomiting of.....	1	Varicella.....	3
Prolapsus recti.....	1	Varicocele.....	1
Prolapsus uteri.....	1	Varicose veins, leg.....	1
Pruritus vulvæ.....	3	Verrucae, removal of.....	11
Psoriasis.....	1	Wounds:	
Pyorrhea alveolaris.....	3	Contused—	
Renal calculus.....	5	Ankle.....	1
Rheumatism, articular:		Hand.....	1
Acute.....	30	Knee.....	1
Chronic.....	5	Shoulder.....	1
Acute, gonorrheal.....	1	Incised—	
Muscular, acute.....	22	Ankle.....	2
Rhinitis:		Arm.....	4
Acute.....	6	Chest.....	1
Hypertrophic, chronic.....	20	Eyelid.....	1
Atrophic.....	3	Face.....	2
Rubeola.....	1	Finger.....	9
Rupture, tendon of finger.....	1	Foot.....	3
Salpingitis, acute.....	3	Forehead.....	3
Sarcoma, thigh.....	1	Hand.....	5
Scabies.....	105	Leg.....	4
Sciatica:		Lip.....	1
Alcoholic.....	1	Scalp.....	5
Rheumatic.....	1	Scrotum.....	1
Scurvy.....	2	Thumb.....	3
Sinus, appendiceal.....	1	Toe.....	2
Sprains:		Tongue.....	1
Ankle.....	15	Wrist.....	1
Elbow.....	4	Infected—	
Finger.....	7	Ankle.....	1
Knee.....	3	Arm.....	2
Thumb.....	3	Buttocks.....	1
Wrist.....	7	Chest.....	1
Sprue.....	4	Ear.....	2
Stomatitis:		Elbow.....	1
Herpetic.....	2	Finger.....	20
Parasitic, acute.....	3	Foot.....	21
Strain:		Forehead.....	1
Muscular.....	5	Hand.....	11
Tendo Achilles.....	1	Knee.....	1
Synovitis, acute, knee.....	2	Leg.....	20
Syphilis:		Lip.....	1
Primary.....	1	Neck.....	1
Secondary.....	9	Toe.....	3
Tertiary.....	2	Lacerated—	
Teeth extracted (cases).....	142	Ankle.....	2
Tendo-synovitis, knee.....	1	Arm.....	2
Thrush.....	3	Eyelid.....	1
Tinea circinata.....	19	Finger.....	13
Tinea sycosis.....	3	Foot.....	3
Tinea imbricata.....	3	Hand.....	3
Toenail, ingrowing.....	1	Heel.....	1
Tonsillitis:		Leg.....	5
Acute.....	20	Scalp.....	1
Follicular, acute.....	16	Thumb.....	2
Trachoma.....	3	Toe.....	2
Tuberculosis:		Punctured—	
Kidney.....	2	Ankle.....	1
Pulmonary.....	73	Arm.....	1
Testicle.....	1	Back.....	2
Ulcer:		Foot.....	11
Cervix.....	1	Hand.....	4
Cornea.....	7	Leg.....	3
Gastric.....	2	Thigh.....	1
Varicose.....	1	Thumb.....	1
Urethritis:		Total.....	3,429
Acute—			
Anterior, gonorrheal.....	8		
Posterior, gonorrheal.....	13		

Hospital cases treated in Baguio Hospital, fiscal year 1911—Continued.

TABLE OF DEATHS.—HOSPITAL CASES FISCAL YEAR 1911.

Date.	Nationality.	Adult or child.	Sex.	Cause of death.
1910.				
July 13	American	Adult	Male	Acute parenchymatous nephritis, complication of cholera Asiatica.
July 17	Filipino	Adult	Male	Cerebral hemorrhage.
Aug. 2	Igorot	Adult	Male	Pernicious malaria.
Aug. 8	do	Adult	Female	Incised wounds, abdomen, arms, legs.
Aug. 16	Filipino	Adult	Male	Abscess, cerebral.
Aug. 17	do	Adult	Male	Tuberculosis, pulmonary, acute.
Aug. 31	Japanese	Adult	Male	Amebic dysentery, acute.
Aug. 22	Filipino	Adult	Female	Poisoning, accidental (bichloride of mercury administered by herself).
Sept. 12	do	Adult	Male	Malignant malaria.
Oct. 31	do	Child	Male	Hemorrhagia neonatorum.
Oct. 31	do	Adult	Male	Tuberculosis, acute, miliary.
Nov. 11	Igorot	Adult	Male	Pneumonia, acute, lobar.
Nov. 15	Filipino	Adult	Female	Tuberculosis, pulmonary, acute miliary.
Nov. 17	Igorot	Adult	Male	Malaria, malignant (pneumonia).
Dec. 9	Filipino	Adult	Male	Pneumonia, acute, lobar.
Dec. 14	do	Child	Female	Malnutrition and rachitis.
1911.				
Jan. 6	Igorot	Adult	Male	Potomaine poisoning.
Jan. 11	do	Adult	Female	Pneumonia, acute, lobar.
Jan. 29	Filipino	Child	Male	Pneumonia, lobar, acute.
Feb. 1	Afro-American	Adult	Male	Cystitis, suppurative; retention of urine; malaria.
Feb. 5	Filipino	Adult	Male	Malaria, estivo-autumnal (malignant).
Feb. 7	do	Adult	Female	Pneumonia, lobar, acute.
Feb. 26	do	Child	Female	do.
Feb. 27	Spaniard	Adult	Female	Fecal fistula; intestinal obstruction; parotitis, acute.
Feb. 28	Igorot	Adult	Male	Pneumonia, lobar, acute.
Apr. 14	Filipino	Child	Male	Tuberculosis, acute, pulmonary.
May 13	do	Child	Male	Pneumonia, lobar.
June 7	do	Adult	Female	Malaria, estivo-autumnal (malignant.)
June 15	do	Adult	Female	Stab wound, chest.
June 21	American	Adult	Male	Pernicious malarial fever.

Total number of deaths during the year..... 30

Total number in dying condition when admitted living 24 hours or less after admission 11

Report of tuberculosis cases—patients under treatment three months or more.

[Classification used is that recommended by the National Association for Study and Prevention of Tuberculosis.]

Number patients treated three months or more..... 17

Number patients remaining in hospital July 1, 1911..... 9

Number cases to be reported on..... 8

Case No.	Race.	Sex.	Age.	Condition on admission.	Stage.	Lung involvement.
*57	American	Female	35	Moderately advanced	II	Right upper lobe.
306	do	Male	24	do	II	do.
368	Filipino	Male	20	do	II	Left upper lobe.
19	do	Male	21	Far advanced	III	Right upper lobe, left upper lobe half left lower lobe.
22	do	Male	65	Moderately advanced	II	Left upper lobe.
179	do	Male	22	Incipient	I	Right apex.
245	American	Female	30	Moderately advanced	II	do.
291	Filipino	Male	20	Incipient	I	do.

* Fiscal year 1909-10.

Report of tuberculosis cases—patients under treatment, etc.—Continued.

Case No.	Weight.		Average maximum temperature 1 week.		Complication.	Days treated.	Condition on discharge.
	Admission.	Discharge.	Admission.	Discharge.			
	Kilos.	Kilos.	°C.	°C.			
*57	42	55	38.1	36.9	Pleurisy	225	Arrested.
306	67.7	71.8	37.5	36.8	Malaria	314	Do.
368	43	49	37	36.7	Pulmonary hemorrhage, otitis media (T. B.).	431	Improved.
19	47.5	(b)	37.2	37.9	Pulmonary hemorrhage, malaria ..	102	Progressive.
22	52	58	37	36.7	Pulmonary hemorrhage	111	Improved.
179	(c)	(d)	36.5	36.6	None	130	Arrested.
245	47.6	48	36.8	36.8	Laryngitis (T. B.)	87	Improved.
291	52	55	35.4	36.4	None	106	Arrested.

* Fiscal year 1909-10.

c Not weighed.

b Not weighed, lost weight.

d Gained at least 4 kilos.

Average stay, 189 days. Average gain in weight, 5.2 kilos (11½ pounds).

Amount of vaccine virus distributed by the Bureau of Health.

	Units.
Amount on hand July 1, 1910.....	7,100
Received from Bureau of Science.....	8,038,500
Total to be accounted for.....	8,045,600
Distributed as per itemized statement.....	8,031,200
Remaining on hand June 30, 1911.....	14,400

Places at which vaccine virus was distributed.

	Units.		Units.
Provinces:		Provinces:	
Albay	58,100	Palawan	600
Ambos Camarines	59,900	Pampanga	23,900
(Baguio Hospital division)	8,800	Pangasinan	64,000
Bataan	7,600	Rizal	21,350
Batangas	55,300	Romblon	25,000
Bulacan	88,400	Samar	100
Cagayan	60,500	Sorsogon	6,800
Cavite	16,200	Tarlac	7,000
Cebu	898,800	Tayabas	65,000
Corregidor Island	2,000	Union	39,300
(Cullion leper colony)	25,500	Zambales	29,000
Ilocos Norte	71,700		
Ilocos Sur	148,800	Total	2,880,150
Iloilo	780,000		
Laguna	33,000	Manila:	
Leyte	165,000	Bureau of Navigation	300
Masbate	300	Health districts	132,050
Mindoro	9,100	Other institutions	18,700
Misamis	21,100		
Mountain	40,500	Total	151,050
Nueva Ecija	17,500		
Nueva Vizcaya	30,000	Grand total	8,081,200

Vaccinations.

[Closed July 26, 1911.]

	Vaccina- tions.	Inspec- tions.	Positive.	Negative.
City of Manila:				
Health district No. 1, Intramuros	14,424	364	256	108
Health district No. 2, Meisic	41,518	5,670	3,919	1,751
Health district No. 4, Sampaloc	9,412	4,338	2,313	2,025
Health district No. 5, Tondo				
Health district No. 6, Paco	6,766	1,795	1,391	404
Total	72,120	12,167	7,879	4,288
Provinces:				
Albay	24,848	11,407	7,702	3,705
Ambos Camarines	24,648	15,537	9,342	6,195
Bataan	5,502	4,375	3,201	1,174
Bohol	47,967	37,040	23,946	13,094
Bulacan	22,548	18,958	14,026	4,932
Capiz	109,661	63,724	44,333	19,391
Cavite	18,826	12,623	7,974	4,649
Cebu	389,997	115,915	82,766	33,149
Ilocos Norte	37,105	33,385	15,086	18,299
Ilocos Sur	73,054	44,765	27,450	17,315
Iloilo	119,850	64,050	46,647	15,403
Isabela	20,071	261	180	81
La Laguna	22,985	20,719	12,147	8,572
La Union	19,053	17,324	10,558	6,766
Mindoro	831	527	365	162
Nueva Ecija	12,810	7,736	6,727	1,009
Occidental Negros	32,741	17,001	11,620	5,381
Pampanga	22,213	18,413	13,342	5,071
Pangasinan	30,664	22,054	13,471	8,583
Risal	14,302	12,739	8,001	4,738
Tarlac	11,740	11,201	7,315	3,886
Tayabas	12,330	11,182	7,310	3,872
Zambales	27,668	16,121	13,069	3,052
Total	1,095,864	577,057	388,578	188,479
Grand total	1,167,984	589,224	396,457	192,767

Report of sera.

	Anti-pestic.	Plague pro- phylactic.	Assorted.
Bottles on hand at the beginning of the year	230	1,024	133
Received from the Bureau of Science			330
Total to be accounted for	230	1,024	463
Issued			330
Total bottles remaining at end of the year	230	1,024	133

Smallpox and plague, city of Manila.

Nationality.	Smallpox.				Varioloid.			
	Cases.		Deaths.		Cases.		Deaths.	
	Male.	Fe- male.	Male.	Fe- male.	Male.	Fe- male.	Male.	Fe- male.
Americans					2			
Filipinos					165	98		
Foreigners								
Chinese								
Total					167	98		

Smallpox and plague, city of Manila—Continued.

District and age.	Smallpox.		Varioloid.	
	Cases.	Deaths.	Cases.	Deaths.
Health Districts:				
No. 1, Intramuros			48	
No. 2, Melsic			111	
No. 4, Sampaloc			86	
No. 5, Tondo			60	
No. 6, Paco			15	
Total			265	
Ages:				
Under 1 year			7	
1 year to 10 years			79	
10 years to 20 years			90	
20 years to 30 years			64	
30 years to 40 years			14	
40 years to 50 years			5	
Over 50 years			6	
Unknown				
Total			265	

Number of cases found alive: Smallpox, 0; varioloid, 265.

Number of cases found dead: Smallpox, 0; varioloid, 0.

Cholera and plague, city of Manila.

Nationality.	Cholera.				Plague.			
	Cases.		Deaths.		Cases.		Deaths.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Americans	2	1	1					
Filipinos	127	82	92	56				
Foreigners	3			1				
Chinese	2		2					
Total	134	83	95	57				

District and age.	Cholera.		Plague.	
	Cases.	Deaths.	Cases.	Deaths.
Health districts:				
No. 1, Intramuros	29	9		
No. 2, Melsic	47	34		
No. 4, Sampaloc	28	16		
No. 5, Tondo	69	56		
No. 6, Paco	44	37		
Total	217	152		
Ages:				
Under 1 year	6	6		
1 year to 10 years	54	47		
10 years to 20 years	30	19		
20 years to 30 years	63	84		
30 years to 40 years	31	21		
40 years to 50 years	15	11		
Over 50 years	18	14		
Unknown				
Total	217	152		

Number of cases found alive: Cholera, 126; plague, 0.

Number of cases found dead: Cholera, 91; plague, 0.

*Tuberculosis cases reported in Manila, during the fiscal year 1910-1911, by districts.**

Health districts.	Male.	Female.	Total.
No. 1, Intramuros.....	17	10	27
No. 2, Melic.....	15	20	35
No. 4, Sampaloc.....	38	15	53
No. 5, Tondo.....	32	49	81
No. 6, Paco.....	23	20	43
Total	125	114	239

* Incomplete.

Does not include 15 provincial cases and 2 permanent residence not stated. Total actually reported, 256.

Cholera in the provinces.

Province.	Cases.	Deaths.	Per cent of deaths.	Province.	Cases.	Deaths.	Per cent of deaths.
Albay:				Cavite—Continued.			
Bató.....	4	3		Imus.....	1	1	
Calolbón.....	5	5		Kawit.....	3	1	
Daraga.....	1	—		Noveleta.....	13	12	
Tabaco.....	4	3		Total	22	19	86.36
Virac.....	60	42					
Total	74	58	71.62	Ilocos Sur:			
Ambos Camarines:				Cauayan.....	2	—	
Baco.....	2	2		Lapok.....	1	1	
Caramoan.....	51	36		Magsingal.....	4	3	
Total	53	38	71.69	Narvacán.....	1	1	
Batangas:				Santa.....	28	14	
Alitagtag.....	8	7		Santa Catalina.....	7	7	
Batangas.....	573	370		Santo Domingo.....	22	19	
Bauan.....	249	154		Tagdín.....	1	1	
Calaca.....	9	6		Vigan.....	127	94	
Cuenca.....	5	4		Total	193	140	72.53
Ibañá.....	83	54		La Union:			
Lemery.....	83	73		Bangar.....	1	—	
Lipa.....	29	14		Rosario.....	4	3	
Loboc.....	16	4		Total	5	3	60.00
Rosario.....	51	19					
San José.....	33	25		Mindoro:			
Taal.....	263	174		Naujan.....	149	127	
Talissay.....	11	3		Total	149	127	85.23
Tanauan.....	5	1					
Total	1,424	908	63.76	Mountain:			
Bulacan:				Camp One.....	4	3	
Angat.....	77	47		Camp Four.....	1	1	
Ballwag.....	93	61		Camp Five.....	1	1	
Bocaue.....	91	56		Total	6	5	83.33
Bulacán.....	21	20					
Calumpit.....	9	7		Nueva Ecija:			
Hagonoy.....	79	58		Aliaga.....	109	78	
Malolos.....	81	60		Cabanatuan.....	66	40	
Meycauayan.....	5	3		Cabiao.....	57	36	
Norazaray.....	39	28		Cuyapo.....	29	18	
Obando.....	64	50		Gapán.....	52	42	
Paombong.....	28	14		Jaén.....	9	8	
Polo.....	6	5		Licab.....	69	30	
Pullán.....	2	1		Nampicán.....	31	25	
Quingua.....	17	11		Pantabangan.....	2	1	
San Ildefonso.....	3	3		Peñaranda.....	29	15	
San Miguel.....	45	31		San Antonio.....	44	33	
San Rafael.....	11	8		San Isidro.....	52	38	
Santa María.....	31	24		San Leonardo.....	5	4	
Total	698	491	70.34	Santa Rosa.....	36	23	
Cavite:				Talavera.....	3	3	
Bacoor.....	3	3		Zaragoza.....	1	1	
Cavite.....	2	2		Total	594	398	66.48

Cholera in the provinces—Continued.

Province.	Cases.	Deaths.	Per cent of deaths.	Province.	Cases.	Deaths.	Per cent of deaths.
Pampanga:				Pangasinan—Cont.			
Angeles	1	1		Santa Maria	71	58	
Apalit	19	18		Santo Tomás	69	44	
Arañat	15	9		Sual	56	36	
Bacolor	11	10		Tayug	21	19	
Candaba	9	9		Umingan	52	41	
Guagua	24	23		Urbiztondo	66	43	
Lubao	16	11		Urdaneta	122	125	
Macabebe	4	4		Villasis	147	97	
Magalang	2	2		Total	2,480	1,808	77.90
Masantol	8	7					
México	1	1		Rizal:			
Minalin	22	20		Antipolo	2	2	
Porac	11	9		Binangonan	104	64	
San Fernando	11	10		Calocan	5	1	
San Luis	10	9		Fort McKinley	3		
San Simón	8	8		Las Piñas	13	6	
Santa Rita	13	18		Malabon	21	21	
Sexmoan	12	11		Marikina	8	5	
Total	197	175	88.83	Navotas	26	22	
Pangasinan:				Pasay	2	2	
Aguilar	35	26		Pasig	46	30	
Alaminos	133	78		Paranaque	1	1	
Alava	1			Pateros	7	6	
Alcalá	50	39		Pililla	26	19	
Anda	3			San Felipe Neri	11	5	
Asingan	65	47		San Juan del Monte	1		
Balungao	88	78		San Pedro Macati	8	3	
Bani	87	82		Taguig	24	20	
Bautista	62	47		Taytay	11	9	
Bayambang	37	34		Total	319	216	67.71
Binalonan	97	89					
Binmaley	12	10		Tarlac:			
Bolinao	52	29		Camiling	24	23	
Calasiao	89	71		Concepción	2	2	
Dagupan	126	113		Gerona	58	64	
Lingayen	35	34		La Paz	20	14	
Malasiqui	18	14		Moncada	1	2	
Mansaoag	244	212		Paniqui	107	73	
Mangaldan	116	107		Pura	2	1	
Mangatarem	23	16		San Manuel	14	10	
Mapanan	49	40		Total	228	179	78.50
Natividad	2	2					
Pozorrubio	89	66		Tayabas:			
Rosales	32	25		Boac	37	22	
Salasa	10	10		Tayabas	2	2	
San Carlos	39	28		Lucena	1	1	
San Fabián	87	68		Total	40	25	62.50
San Isidro	1	1					
San Jacinto	57	38		Grand total and average	6,482	4,670	74.00
San Manuel	6	5					
San Nicolás	8	7					
San Quintín	25	18					
Santa Bárbara	48	46					

Mortality among Government employees.

[Closed July 25, 1911.]

	Ameri- cans.	Filipi- nos.		Ameri- cans.	Filipi- nos.
Average number of employees	2,366	11,905	Deaths from cause not reported:		
Deaths reported:			Average years of service		0.33
From illness	17	26	Average age at death		(?)
Violence	4	8	Annual death rate per 1,000		0.08
Cause not reported		1	All deaths:		
Total	21	35	Average years of service	2.78	5.09
Deaths from illness:			Average age at death	32	34
Average years of service	2.78	5.75	Annual death rate per 1,000	8.87	2.93
Average age at death	33	33	Both nationalities:		
Annual death rate per 1,000	7.18	2.18	Population	14,271	
Deaths from violence:			Number of deaths	56	
Average years of service	2.67	2.69	Average years of service	4.26	
Average age at death	26	43	Average age at death	32	
Annual death rate per 1,000	1.69	0.67	Annual death rate per 1,000	3.92	

All are males with the exception of one American and one Filipina.

General return of births and deaths in the various provinces of the Philippine Islands, during the calendar year 1910.

	Agusan.	Albay.	Ambos Camarines.	Antique.	Bataan.	Batanes.	Batangas.
Average of population.....	18,094	245,537	242,254	134,400	46,044	8,002	294,884
Births.....	497	11,893	9,269	5,018	2,066	283	11,865
Annual birth rate per 1,000.....	27.57	48.43	38.26	37.33	44.87	35.14	52.43
Deaths:							
From 0 to 1 year.....	106	1,714	1,433	690	608	67	3,147
From 1 to 2 years.....	28	591	692	385	165	14	895
From 2 to 5 years.....	44	743	866	464	166	8	1,090
From 5 to 10 years.....	21	310	341	206	76	5	453
From 10 to 20 years.....	28	330	411	162	69	8	496
From 20 to 30 years.....	35	459	478	150	123	15	789
From 30 to 40 years.....	18	317	356	144	110	18	572
From 40 to 50 years.....	28	322	306	123	100	13	452
From 50 to 60 years.....	17	320	332	106	83	25	413
Over 60 years.....	21	884	784	293	153	64	755
Unknown.....	10	1	8	1	0	0	4
Causes of death:							
Typhoid fever.....	21	78	66	9	17	0	118
Malarial fever.....	44	449	561	417	227	8	1,442
Malarial cachexia.....	0	32	13	7	50	1	323
Smallpox.....	0	0	0	388	0	0	0
Whooping cough.....	5	39	81	9	4	0	37
Cholera.....	0	12	51	0	54	0	841
Dysentery.....	55	212	1,124	389	136	3	547
Other epidemic diseases (beriberi).....	8	45	72	0	13	0	79
Tuberculosis—							
Of the lungs.....	4	360	473	282	127	18	711
Of other organs.....	2	61	57	10	27	3	177
Congestion and hemorrhage of the brain.....	0	23	5	0	13	1	27
Convulsions of children.....	53	978	451	199	330	24	1,385
Bronchitis, acute.....	2	322	90	1	26	1	313
Diarrhea and enteritis—							
Under 2 years.....	0	117	30	49	16	5	89
Under 2 years, chronic.....	1	68	45	76	27	3	78
2 years and over.....	3	147	46	73	40	3	98
Violence—							
Suicide.....	0	3	9	1	3	0	37
Not suicide.....	4	26	33	20	5	3	58
All other diseases.....	149	3,019	2,750	694	538	159	2,706
Total.....	351	5,991	5,957	2,724	1,653	282	9,066
Males.....	204	3,088	3,132	1,379	902	126	4,816
Females.....	147	2,903	2,825	1,345	751	106	4,250
Annual death rate per 1,000.....	19.39	24.39	24.58	20.26	35.90	28.81	30.74
A classified report of all deaths occurring:							
Males—							
Married.....	44	630	606	193	189	39	989
Widowers.....	15	339	340	109	76	14	312
Single.....	23	246	322	98	75	7	868
Boys.....	122	1,833	1,862	977	562	66	3,138
Condition not stated.....	0	0	2	2	0	0	9
Females—							
Married.....	35	612	567	251	167	22	920
Widows.....	19	467	471	148	90	40	574
Single.....	11	308	247	101	34	12	272
Girls.....	82	1,516	1,537	805	445	32	2,472
Condition not stated.....	0	0	3	0	15	0	12

General return of births and deaths, etc.—Continued.

	Bohol.	Bulacan.	Cagayan.	Capiz.	Cavite.	Ilocos Norte.	Ilocos Sur.
Average of population.....	269,223	225,756	137,155	225,025	139,707	174,642	210,531
Births.....	11,865	10,869	5,566	9,014	6,643	8,572	9,964
Annual birth rate per 1,000.....	44.67	48.14	40.57	40.05	47.54	49.06	47.21
Deaths:							
From 0 to 1 year.....	1,589	3,404	1,261	1,287	1,908	1,097	1,572
From 1 to 2 years.....	654	673	584	476	532	446	606
From 2 to 5 years.....	795	1,114	614	690	523	684	856
From 5 to 10 years.....	478	375	289	384	154	288	343
From 10 to 20 years.....	482	350	234	339	174	283	264
From 20 to 30 years.....	437	683	295	383	334	273	369
From 30 to 40 years.....	348	662	306	319	280	247	377
From 40 to 50 years.....	275	478	256	298	223	219	345
From 50 to 60 years.....	288	399	218	322	216	208	294
Over 60 years.....	961	1,016	502	637	492	664	800
Unknown.....	22	1	3	23	2	2	6
Causes of death:							
Typhoid fever.....	0	121	14	27	23	27	57
Malarial fever.....	516	470	974	562	645	1,029	1,290
Malarial cachexia.....	468	42	70	75	260	106	59
Smallpox.....	22	17	0	421	0	0	32
Whooping cough.....	253	36	6	130	20	27	103
Cholera.....	23	784	0	0	116	0	1
Dysentery.....	418	418	337	637	312	396	641
Other epidemic diseases (beriberi).....	32	273	44	51	62	28	18
Tuberculosis.....							
Of the lungs.....	310	882	249	479	314	435	517
Of other organs.....	12	232	45	50	41	98	17
Congestion and hemorrhage of the brain.....	0	61	4	9	23	8	6
Convulsions of children.....	263	2,820	417	270	1,299	336	528
Bronchitis, acute.....	14	216	28	36	132	42	92
Diarrhea and enteritis—							
Under 2 years.....	2	44	6	60	125	29	105
Under 2 years, chronic.....	2	79	13	44	151	17	83
2 years and over.....	7	166	21	80	152	84	38
Violence—							
Suicide.....	32	8	10	16	3	3	9
Not suicide.....	25	31	27	80	22	42	51
All other diseases.....	3,990	2,455	2,296	2,081	1,133	1,559	2,145
Total.....	6,829	9,155	4,561	5,108	4,838	4,311	5,792
Males.....	3,194	4,817	2,449	2,611	2,581	2,216	2,994
Females.....	3,135	2,338	2,112	2,497	2,257	2,095	2,798
Annual death rate per 1,000.....	23.50	40.55	33.25	22.69	34.62	24.68	27.47
A classified report of all deaths occurring:							
Males—							
Married.....	618	963	530	539	485	499	591
Widowers.....	207	388	251	231	181	215	261
Single.....	251	379	175	260	175	181	205
Boys.....	1,975	2,968	1,488	1,579	1,712	1,804	1,920
Condition not stated.....	43	119	5	2	28	17	17
Females—							
Married.....	655	1,004	400	467	420	433	619
Widows.....	401	550	324	467	334	296	395
Single.....	469	321	119	240	116	201	191
Girls.....	1,581	2,370	1,267	1,317	1,365	1,160	1,566
Condition not stated.....	29	93	2	6	22	5	27

General return of births and deaths, etc.—Continued.

	Iloilo.	Laguna.	Leyte.	Misamis.	Nueva Ecija.	Nueva Vizcaya.	Occidental Negros.
Average of population	408,260	144,522	494,602	182,601	132,999	19,720	804,698
Births.....	16,841	6,985	18,986	5,671	5,450	644	11,017
Annual birth rate per 1,000 ..	41.76	47.99	38.28	42.76	40.97	32.65	36.16
Deaths:							
From 0 to 1 year	2,378	1,903	2,565	1,110	1,243	163	2,018
From 1 to 2 years	985	482	1,086	265	225	56	964
From 2 to 5 years	1,420	500	1,267	320	796	95	1,211
From 5 to 10 years	555	184	934	188	318	54	464
From 10 to 20 years	559	217	963	215	308	50	482
From 20 to 30 years	729	435	983	385	470	79	666
From 30 to 40 years	620	356	646	203	386	64	484
From 40 to 50 years	540	333	548	167	302	58	474
From 50 to 60 years	502	319	501	132	242	50	188
Over 60 years	777	585	932	275	571	118	620
Unknown	0	14	187	37	8	0	28
Causes of death:							
Typhoid fever	44	152	54	154	43	2	18
Malarial fever	712	783	610	582	752	234	1,016
Malarial cachexia	308	224	139	22	228	2	256
Smallpox	221	9	60	0	32	0	190
Whooping cough	42	63	135	62	34	2	38
Cholera	0	1	187	41	379	0	0
Dysentery	997	353	1,312	282	178	84	1,475
Other epidemic diseases (beriberi)	61	55	212	87	31	14	69
Tuberculosis—							
Of the lungs	1,116	623	691	220	527	112	792
Of other organs	255	33	11	58	45	8	17
Congestion and hemorrhage of the brain	27	34	10	4	9	0	12
Convulsions of children	1,577	1,025	904	155	914	101	1,188
Bronchitis, acute	222	95	176	2	80	1	20
Diarrhea and enteritis—							
Under 2 years	183	57	108	11	97	6	82
Under 2 years, chronic	46	66	93	5	50	0	23
2 years and over	215	77	282	25	92	6	104
Violence:							
Suicide	10	9	16	16	2	0	15
Not suicide	55	48	144	3	1	5	54
All other diseases	2,994	1,460	5,458	1,458	1,666	210	2,430
Total	9,085	5,328	10,602	3,197	5,160	782	7,799
Males	4,839	2,799	5,606	1,701	2,742	404	4,220
Females	4,246	2,529	4,996	1,496	2,418	378	3,579
Annual death rate per 1,000	22.52	36.86	21.48	24.10	38.79	39.65	25.59
A classified report of all deaths occurring:							
Males—							
Married	859	662	941	402	690	115	700
Widowers	310	240	407	104	231	44	408
Single	396	202	534	149	246	37	405
Boys	3,063	1,654	3,378	1,031	1,556	1,199	2,649
Condition not stated	11	41	346	15	19	9	58
Females—							
Married	770	589	1,019	356	553	92	691
Widows	707	393	534	153	344	87	483
Single	335	155	437	107	159	22	217
Girls	2,422	1,351	2,720	852	1,361	173	2,138
Condition not stated	12	41	286	26	1	4	50

General return of births and deaths, etc.—Continued.

	Pam- panga.	Panga- sinan.	Risal.	Rom- blon.	Suri- gao.	Tariac.	Taya- baa.	Union.
Average of population -----	225, 113	439, 766	152, 058	55, 559	79, 108	139, 971	201, 986	128, 893
Births -----	12, 080	22, 128	2, 586	1, 694	2, 061	6, 976	7, 888	6, 228
Annual birth rate per 1,000 -----	53.66	50.31	56.13	30.49	26.05	49.88	38.88	48.28
Deaths: -----								
From 0 to 1 year -----	2, 856	3, 683	2, 625	275	304	1, 516	1, 749	710
From 1 to 2 years -----	772	1, 965	506	114	141	567	490	329
From 2 to 5 years -----	943	3, 043	586	146	132	757	491	368
From 5 to 10 years -----	408	1, 463	144	77	90	310	251	161
From 10 to 20 years -----	290	1, 191	202	90	87	297	351	186
From 20 to 30 years -----	512	1, 648	417	96	90	468	484	199
From 30 to 40 years -----	542	1, 368	374	83	49	324	412	135
From 40 to 50 years -----	396	976	287	86	54	258	387	107
From 50 to 60 years -----	312	778	300	80	59	202	354	117
Over 60 years -----	886	2, 090	658	168	104	510	696	390
Unknown -----	2	11	42	0	24	0	5	0
Causes of death: -----								
Typhoid fever -----	218	271	77	27	8	134	79	158
Malarial fever -----	923	2, 192	298	183	215	805	579	317
Malarial cachexia -----	244	474	174	18	5	241	177	122
Smallpox -----	0	0	5	7	0	1	54	0
Whooping cough -----	14	75	34	4	9	44	123	17
Cholera -----	516	3, 144	286	0	0	376	4	0
Dysentery -----	292	1, 732	302	59	184	242	251	468
Other epidemic diseases (beriberi) -----	109	81	251	29	6	42	68	16
Tuberculosis -----								
Of the lungs -----	894	1, 654	433	85	24	500	656	174
Of other organs -----	58	86	137	13	5	41	103	48
Congestion of the brain -----	37	46	47	34	0	12	36	14
Convulsions of children -----	1, 954	2, 138	1, 860	94	23	861	607	302
Bronchitis, acute -----	122	150	227	11	7	36	164	33
Diarrhea and enteritis -----								
Under 2 years -----	66	78	50	8	14	19	52	7
Under 2 years, chronic -----	69	83	88	3	16	16	35	28
2 years and over -----	74	294	85	12	12	78	37	31
Violence -----								
Suicide -----	19	0	4	5	0	3	6	4
Not suicide -----	34	119	44	4	5	37	39	25
All other diseases -----	2, 231	5, 519	1, 739	614	601	1, 711	2, 603	963
Total -----	7, 869	18, 136	6, 091	1, 215	1, 184	5, 194	5, 672	2, 722
Males -----	4, 178	9, 557	3, 195	829	661	2, 760	2, 987	1, 426
Females -----	3, 691	8, 579	2, 896	586	473	2, 434	2, 685	1, 296
Annual death rate per 1,000 -----	34.95	41.24	40.05	21.86	14.33	37.10	28.06	21.11
A classified report of all deaths occurring: -----								
Males -----								
Married -----	823	2, 397	577	144	133	626	806	303
Widowers -----	282	801	259	89	39	210	257	138
Single -----	273	561	201	61	50	150	203	102
Boys -----	2, 795	5, 762	2, 133	335	484	1, 774	1, 713	881
Condition not stated -----	5	36	25	0	5	0	8	2
Females -----								
Married -----	786	2, 229	613	139	100	541	709	275
Widows -----	439	1, 140	390	114	47	326	418	193
Single -----	205	448	120	50	51	111	174	97
Girls -----	2, 251	4, 757	1, 757	283	272	1, 455	1, 381	730
Condition not stated -----	10	5	16	0	8	1	3	1

STATEMENT OF EXPENDITURES.

The following statement shows the expenditures made during the fiscal year 1911 chargeable against the appropriation made by Act 1989 for the Bureau of Health during that period:

Amount appropriated	₱1,417,000.00
Transferred from last year's appropriation for accounts payable, fiscal year 1910	13,282.22
Carried from fiscal year 1910 for contingent liabilities	232,284.13
Amount restored during the fiscal year	92,500.00
Total	1,755,066.35

Expenditures chargeable as follows:

General:

Salaries and wages	₱138,956.20
Transportation in Manila	11,018.00
Stationery and office supplies	2,882.50
Repairs to furnitures	957.35
Telephone rent	1,253.67
Incidentals	7,117.02
Light, sanitary stations	1.76
Postage and telegrams	3,586.31
Cablegrams	236.11
Printing and binding	12,599.42
Periodicals	72.34
Street-car tickets	3,280.00
Hospicio de San José	44,587.85
Colegio de Santa Isabel	3,001.70
Asilo de San Vicente de Paul	3,800.00
Protection of infants	3,499.93
Hookworm campaign	130.14
Rent, sanitary station	240.00
Disinfectants, sanitary stations	9,498.94
Rent, post-office box	32.00
Repairs disinfecting apparatus	1.80
Medicines, Central Free Dispensary	3,127.39
Incidentals, Central Free Dispensary	44.30
Medicines, Philippine Medical School	594.91
Medicines, medical and surgical supplies for in- digent persons	10,908.77
Traveling expenses and per diems of employees.....	4,987.65
Flannel for infants	639.21
Commutation of leave and transportation of employees to and from United States	27,794.15
Miscellaneous and freight	1,293.43
Treatment of Government employees at Iloilo.....	2,990.00
Salaries of secretary-treasurers and examination fees of members of the Boards of Medical, Pharmaceutical, and Dental Examiners	1,249.00
Outdoor treatment of tuberculosis	13,614.30
Equipment for tuberculosis cottages and night camp	4,851.27
Equipment for temporary use of employees.....	861.69
Equipment miscellaneous, property division	(3,588.12)
New furniture	3,336.51
Stock, miscellaneous articles and supplies.....	(18,736.37)

300,521.73

Inspection division:

Salaries and wages—

Medical inspectors	P80,224.51
District health officers	49,650.42
Sanitary inspectors and employees	8,818.43
Traveling expenses and per diems of—	
Medical inspectors	2,206.35
District health officers	6,437.11
Sanitary inspectors	1,925.97
Serum, antiplague	283.45
Sera, miscellaneous	27.76
Photographs	327.62
Transportation in the city	8,823.15
Keeping automobile	3,993.17
Transportation equipment	10,608.85
Financial aid to municipality of Quingua for the completion of organization of health district of Bulacan Province	500.00

P153,925.79

Vaccination division:

Salaries and wages	30,615.63
Traveling expenses of vaccinators	4,429.36
Vaccine virus	30,644.77
Antiseptic supplies and dressings	1,195.21
Ice for virus	484.95

67,369.92

San Lazaro Hospital division:

Salaries and wages	33,427.41
Subsistence supplies	37,356.94
Light	3,377.20
Telephone rent	297.00
Forage and horseshoeing	10.50
Transportation	539.04
Clothing for lepers	524.29
Office supplies and incidentals	2,897.73
Laundry allowances	102.08
Repairs	358.53
Medicines, medical and surgical supplies	5,467.07
Fuel	2,339.85
Soap	2,317.43
Cigarettes and tobacco	156.64
Gratuity to lepers	553.31
Commutation of subsistence	23.33
Construction of sewers	8,042.35
New furniture and equipment	5,000.04

102,790.74

Civil Hospital division:

Salaries and wages	11,770.63
Commutation of subsistence	480.00
Subsistence supplies	5,149.28
Rent of building	2,058.25
Laundry hospital	1,408.90
Laundry allowances	242.34
Light	742.20
Transportation	580.22

Civil Hospital division—Continued.

Telephone rent	P57.64
Repairs	90.60
Incidentals	7,849.56
Miscellaneous supplies	1,545.21
Equipment	(7,536.48)

P24,438.35

Philippine General Hospital division:

Salaries and wages	63,116.05
Commutation of subsistence	1,589.65
Subsistence supplies	67,197.20
Light	6,195.81
Telephone rent	868.79
Coal, oil, gas, and steam.....	4,782.66
Laundry hospital	9,604.35
Laundry allowances	1,615.22
Transportation	1,971.95
Medicines, medical and surgical supplies.....	18,383.26
Repairs	142.04
Maintenance of grounds	3,802.72
Office supplies	1,138.90
Miscellaneous supplies	13,618.94
Incidentals	1,281.40
Salaries, laundry allowances, and subsistence of pupil nurses	30,165.34
Hospital equipment	153,447.25
Improvements on building	572.39

379,493.92

Culion leper colony division:

Salaries and wages	24,776.06
Subsistence supplies	124,994.39
Medicines, medical and surgical supplies	10,739.26
Bedding, towels, and linen, lepers	741.62
Gratuity to lepers	23,018.80
Incidentals	1,402.81
Clothing lepers	5,044.52
Freight	9,666.53
Repairs	2,507.69
Stationery and printing	220.95
Miscellaneous supplies	2,389.23
Collection of lepers	19,565.97
Construction	73,472.84
Equipment hospital	1,324.44
Equipment kitchen	68.80
Equipment various	5,513.70
Stock account	15,676.82

321,124.43

Prison sanitation division:

Salaries and wages	6,770.00
Commutation of laundry, subsistence, and quarters..	382.40
Medicines, medical and surgical supplies	8,220.68
Disinfectants	979.34

16,352.42

Baguio Hospital division:

Salaries and wages	P9,672.39
Commutation of subsistence	1,215.09
Subsistence supplies	9,166.78
Repairs	1,040.86
Laundry hospital	1,034.81
Laundry allowances	199.18
Fuel	363.90
Stationery and incidentals	1,101.14
Disinfectants	163.76
Medicines and medical supplies	2,167.64
Freight	1,137.37
Light	829.84
Surgical supplies	206.60
Equipment	811.26
Improvement on building	17.75
Stock account	6,152.13

P35,270.50**Suppression and extermination of epidemic diseases and pests:**

Salaries and wages	17,282.46
Miscellaneous expenses	16,300.08
Disinfecting apparatus	107.80

33,690.34**Set aside for permanent improvements:**

Government Center, Baguio	5,098.04
Service hall, Philippine General Hospital.....	66,942.52
For the completion of nurses and doctors' quarters, San Lazaro Hospital	6,000.00
For the completion of Southern Hospital, Cebu.....	50,000.00

128,040.56**Transferred to other Bureaus:**

Bureau of Science	40,000.00
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Grand total 1,602,918.70

In addition to the foregoing statement of actual expenditures are the following outstanding obligations chargeable to the appropriation of the Bureau and funds appropriated for same during the fiscal year 1911:

General:

Salaries and wages	P44.17
Stationery and office supplies21
Incidentals	549.95
Printing and binding	1,200.00
Periodicals	6.00
Traveling expenses and per diems	951.63
Miscellaneous supplies and freight	500.00
Treatment of Government employees at Iloilo.....	319.25
Salaries and fees of Board of Examiners	213.00
Construction of tuberculosis cottages at Baguio.....	8,000.00
Construction of Filipino cottages at Baguio.....	1,100.00
New furniture	149.50
Stock	89,062.75

P102,096.46

Inspection division:

Salaries and wages of district health officers	P30.00
Traveling expenses of medical inspectors	95.50
Traveling expenses of district health officers	555.94
Keeping automobile80

P682.24

Vaccination division:

Salaries and wages	375.00
Traveling expenses of vaccinators	728.54
Ice for virus	67.39

1,170.93

San Lazaro Hospital Division:

Subsistence supplies	5,577.87
Light	1,250.70
Office supplies and incidentals	10.00
Repairs	65.00
Gratuity to lepers	511.37

7,414.94

Philippine General Hospital:

Salaries and wages	453.33
Commutation of subsistence	3,733.48
Laundry allowances	2.20
Transportation	9.68
Medicines, medical and surgical supplies	12.36
Repairs	207.00
Incidentals	282.72
Salaries, laundry allowances and subsistence of pupil nurses	55.86

4,756.63

Cullion leper colony division:

Salaries and wages	1,311.29
Subsistence supplies	4,953.30
Incidentals	25.00
Freight	1,032.10
Collection of lepers	3,387.80
Construction	5,192.19
Stock account	11,055.29

26,957.06

Prison sanitation division:

Commutation of subsistence and quarters	35.00
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Baguio Hospital division:

Subsistence supplies	602.00
Repairs	309.98
Stationery and incidentals	39.00
Freight	100.00
Light	152.50
Stock account	7,135.54

8,338.96

Grand total 151,452.22

The following amounts as credit were collected during the year:

Collections of the cashier, Bureau of Health	P63,337.28
Collections of the cashiers, Civil and General Hospitals	31,182.63
Collections of the cashier, Baguio Hospital	7,647.51
Collections of the secretary-treasurer, Board of Medical Examiners ..	1,430.00

Collections of the secretary-treasurer, Board of Pharmaceutical Examiners	₱1,220.00
Collections of the secretary-treasurer, Board of Dental Examiners....	160.00
Sales of disinfectants, medicines, and equipment	3,812.75
Deductions from salaries of employees on account of hospital bills..	5,416.12
Charges against city of Manila for beds at Philippine General Hospital	15,816.50
Charges against Philippine Medical School for beds at Philippine General Hospital	22,624.00
Amount turned over by Bureau of Public Works as net receipts of the operation of Sibul Spring baths	387.46
Deductions from salaries of employees on account of articles lost....	17.60
Care and maintenance of insane scouts at San Lazaro Hospital.....	2,698.30
Services of employees to other Offices and Bureaus.....	1,734.11
Miscellaneous	17.12
Accounts receivable	64,135.71
Total	221,637.09
Of the above collections the following sum pertains to the fiscal year 1910 as account receivable of that year	33,175.00
Total receipts	188,462.09
Total funds made available during the fiscal year 1911.....	₱1,755,066.35
Total expenses and expenditures during the year.....	₱1,602,918.70
Outstanding liabilities	151,452.22
Total	1,754,370.92
Receipts for fiscal year 1911	188,462.09
Total chargeable against general funds	1,565,908.83
Total available	189,157.52
The following statement shows the expenditures made from appropriation made by Act No. 1992 for the Bureau of Health for the Mountain and Moro Provinces, Nueva Vizcaya and subprovince of Agusan:	
Appropriated	₱28,000.00
Accounts payable	454.94
Total	28,454.94
Expenditures:	
Salaries and wages	10,460.51
Miscellaneous expenses.....	4,501.26
Equipment	129.98
Liabilities estimated	2,500.00
	17,591.75
Balance available	10,863.19



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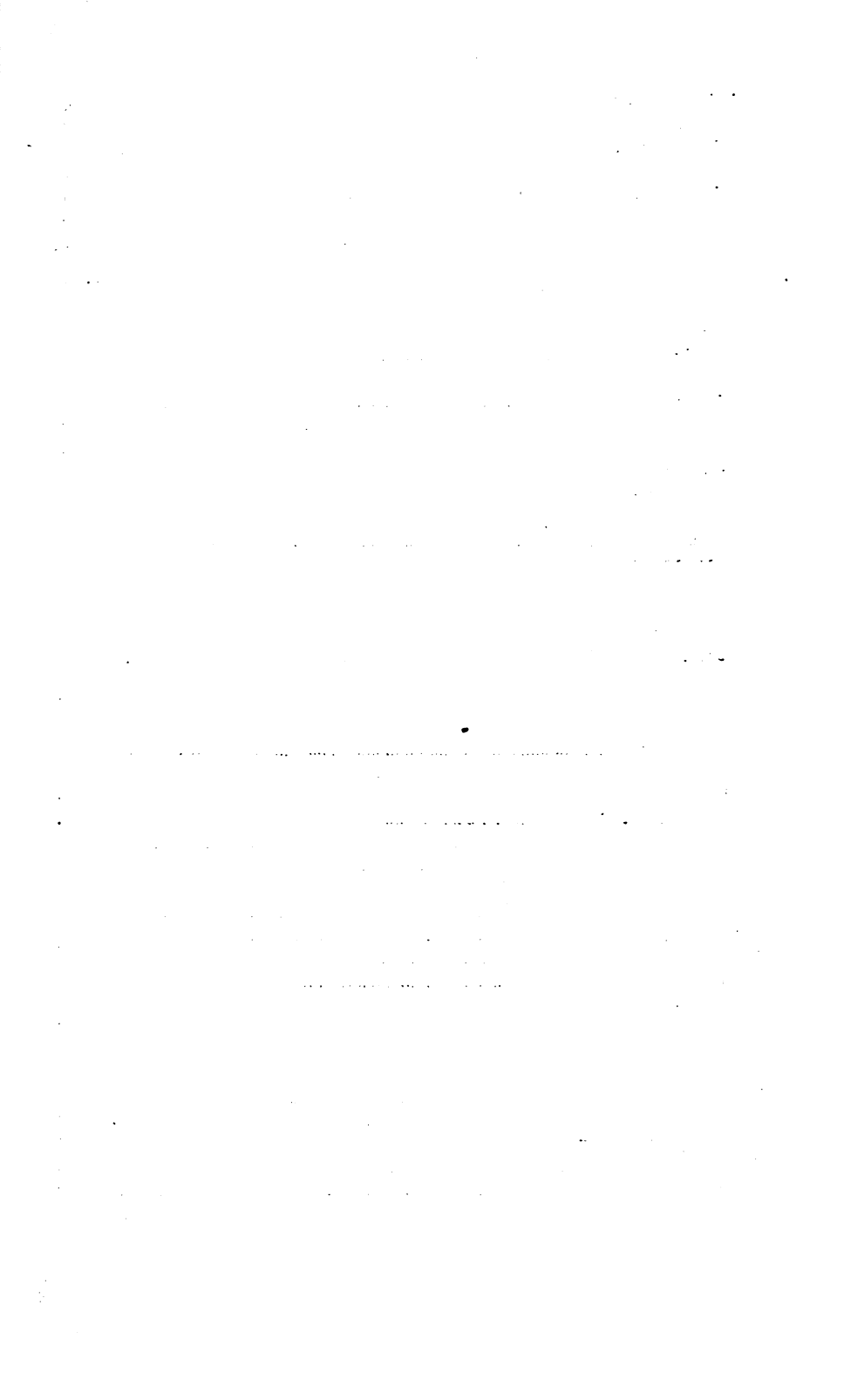
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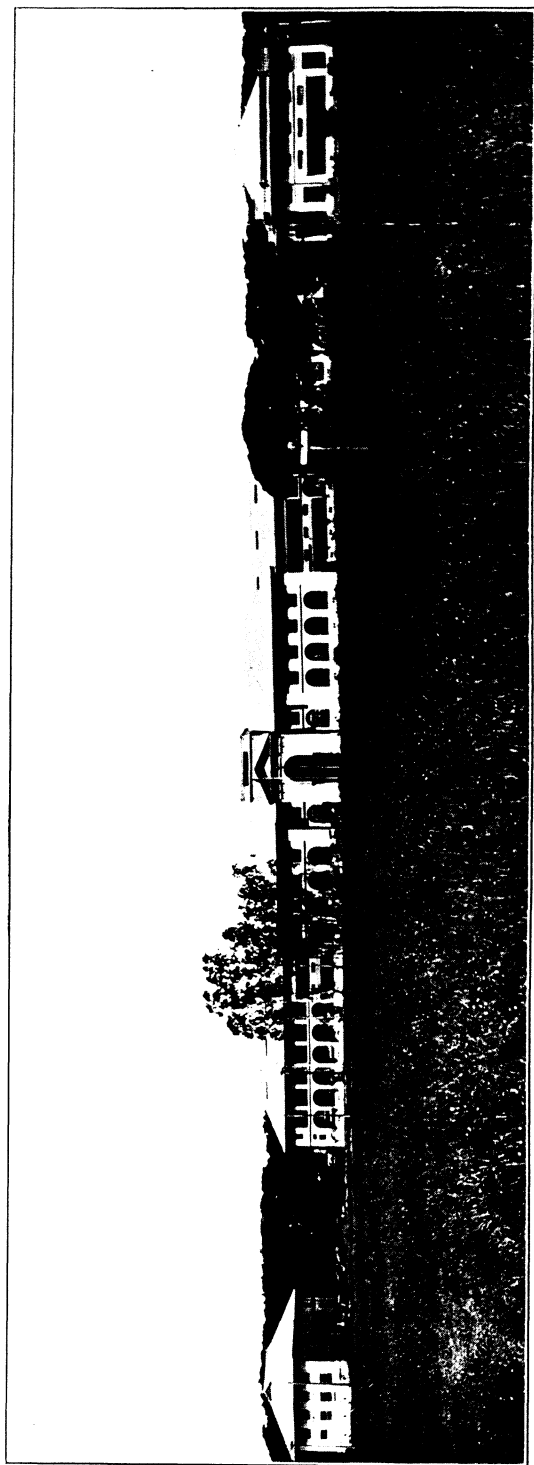
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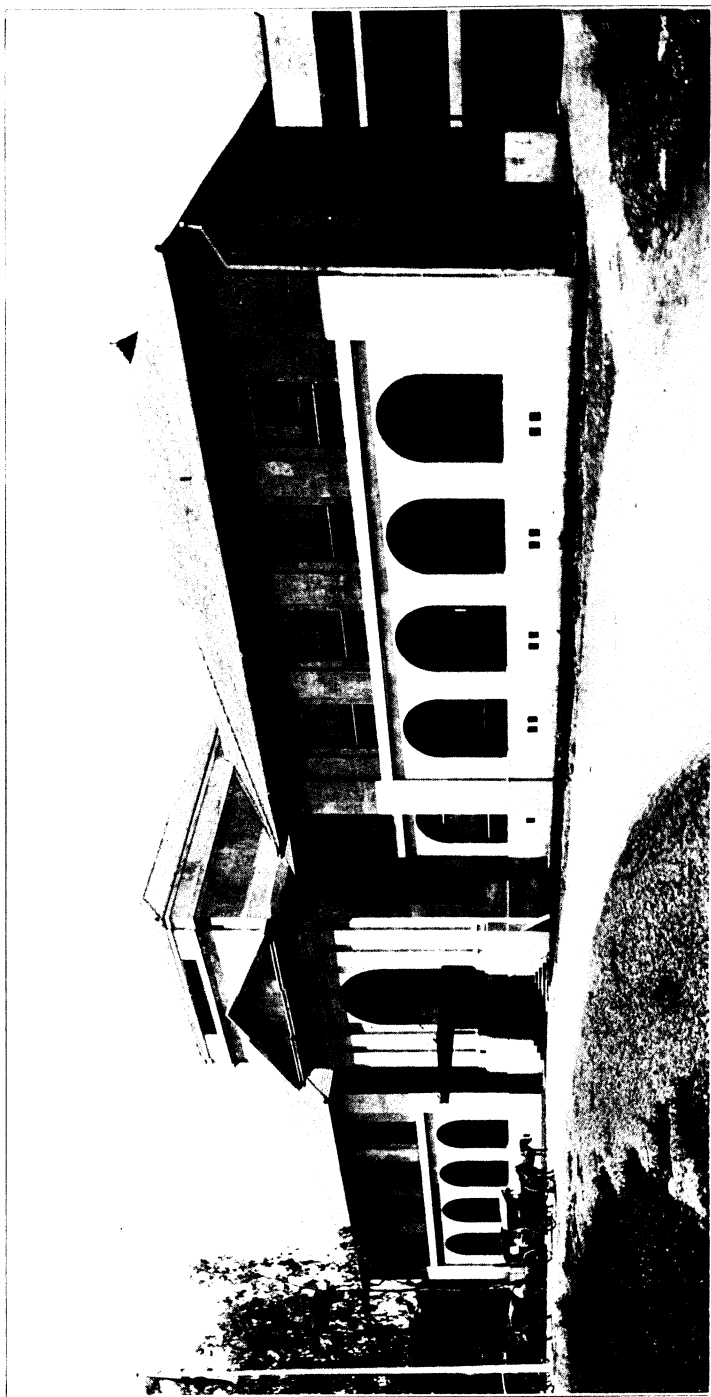




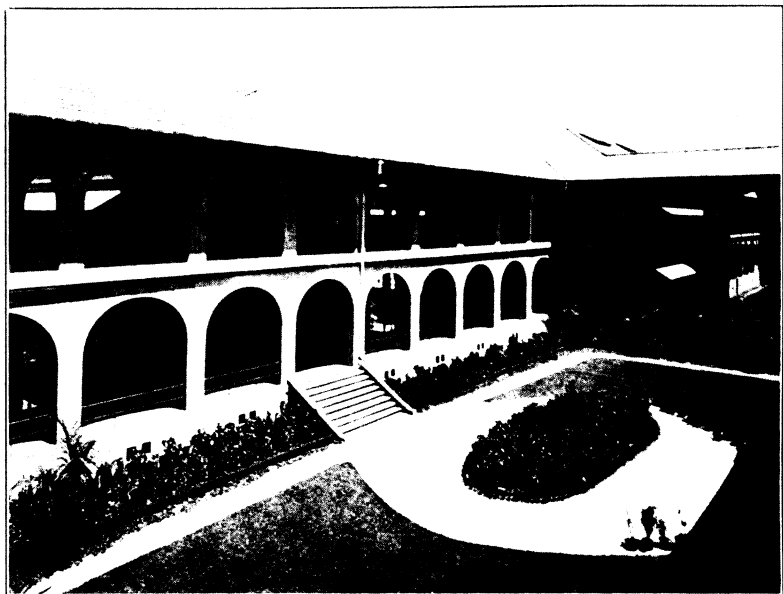
Dispensary.

Front view
PHILIPPINE GENERAL HOSPITAL.

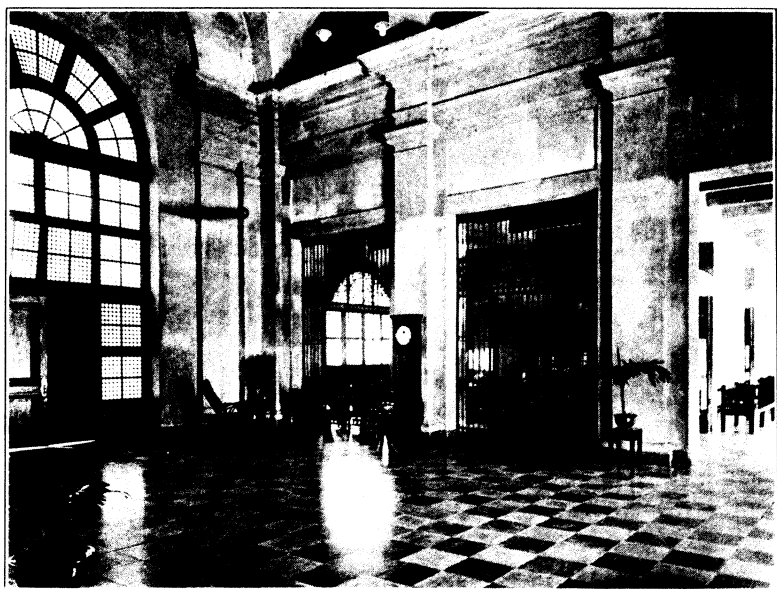
Nurses' home.



ADMINISTRATION BUILDING, PHILIPPINE GENERAL HOSPITAL.



SECTION OF CORRIDOR AND INCLOSED COURT, PHILIPPINE GENERAL HOSPITAL.



MAIN ENTRANCE, PHILIPPINE GENERAL HOSPITAL.



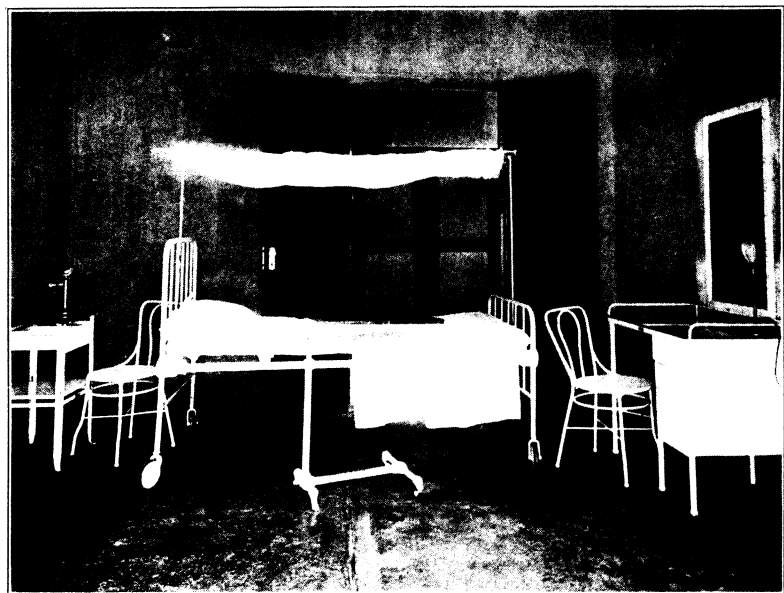
ADMINISTRATION OFFICE, PHILIPPINE GENERAL HOSPITAL.



MEDICAL CONSULTING OFFICE, PHILIPPINE GENERAL HOSPITAL.



NATIVE WARD, FEMALE, PHILIPPINE GENERAL HOSPITAL.



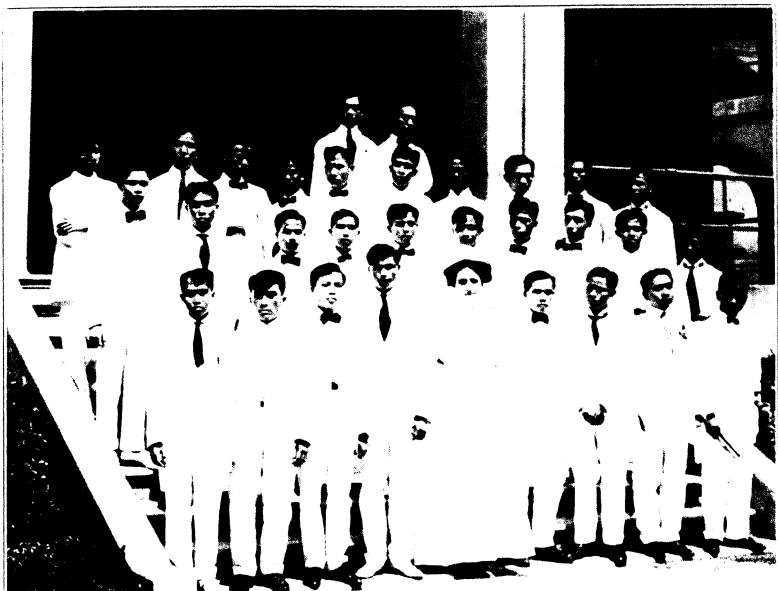
PRIVATE ROOM WITH BATH, TELEPHONE, ETC., PHILIPPINE GENERAL HOSPITAL.



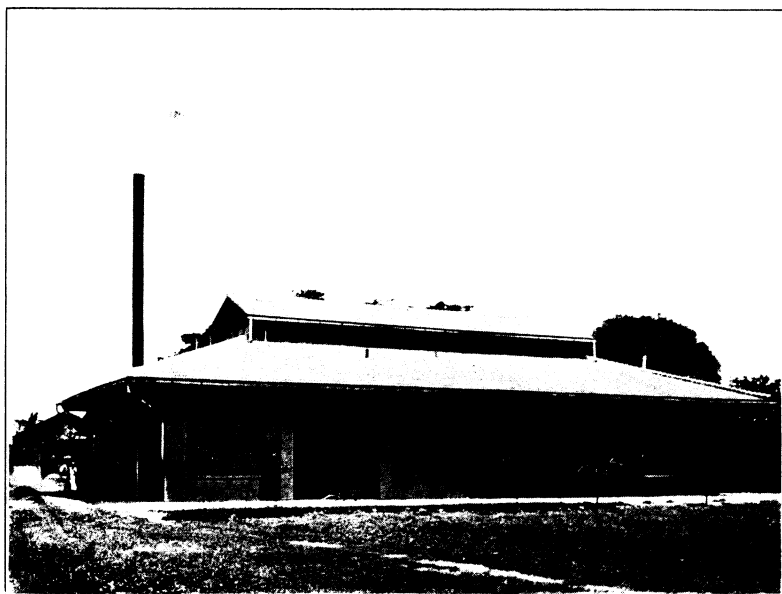
SECTION OF MAIN KITCHEN, PHILIPPINE GENERAL HOSPITAL.



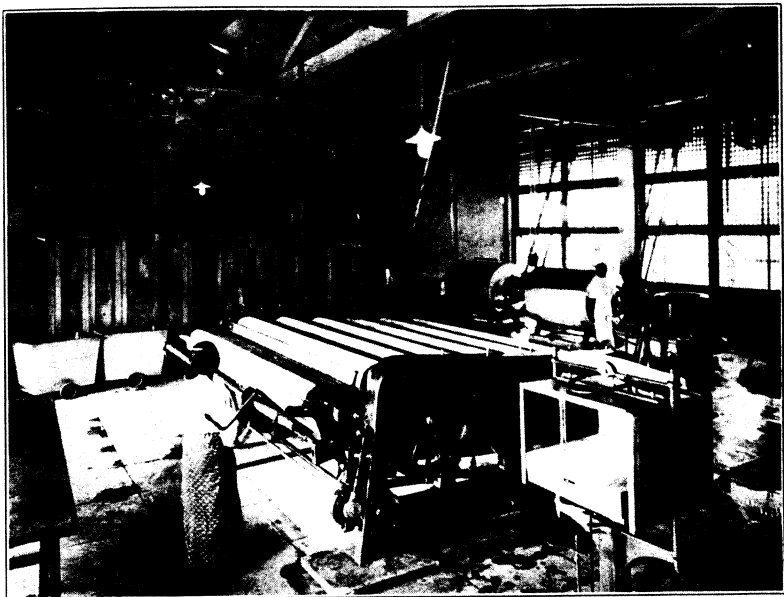
CHIEF NURSE, FOUR GRADUATE FILIPINA NURSES, AND FILIPINA PUPILS OF THE TRAINING SCHOOL FOR NURSES, PHILIPPINE GENERAL HOSPITAL.



CHIEF NURSE AND FILIPINO PUPILS OF THE TRAINING SCHOOL FOR NURSES.
PHILIPPINE GENERAL HOSPITAL.



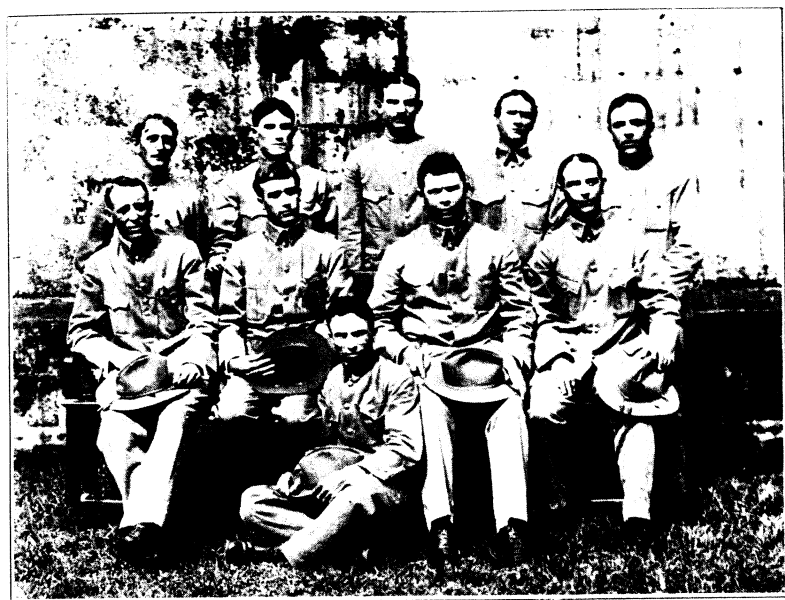
NEW LAUNDRY, SAN LAZARO HOSPITAL DIVISION.



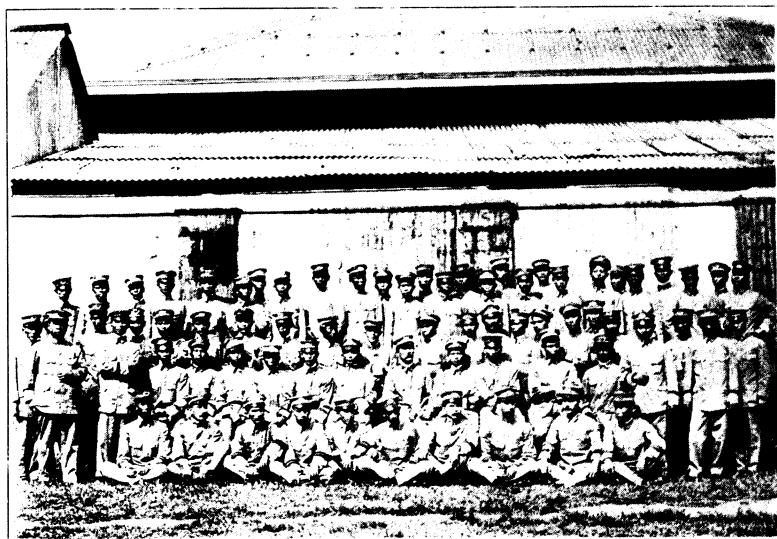
INTERIOR OF LAUNDRY, SAN LAZARO HOSPITAL DIVISION.



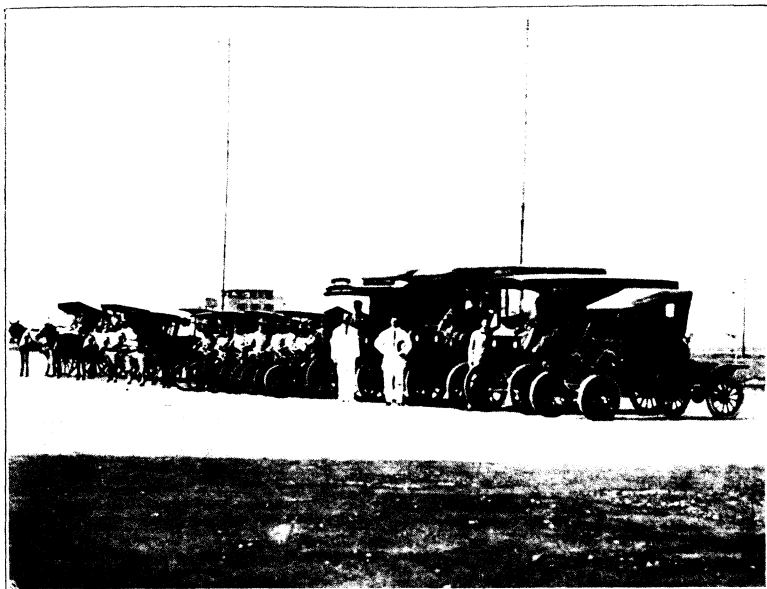
NEW CONCRETE BUILDING FOR DANGEROUS COMMUNICABLE DISEASES,
SAN LAZARO HOSPITAL DIVISION.



AMERICAN SANITARY INSPECTORS.



ASSISTANT SANITARY INSPECTORS.



PORTION OF EQUIPMENT USED BY THE BUREAU.



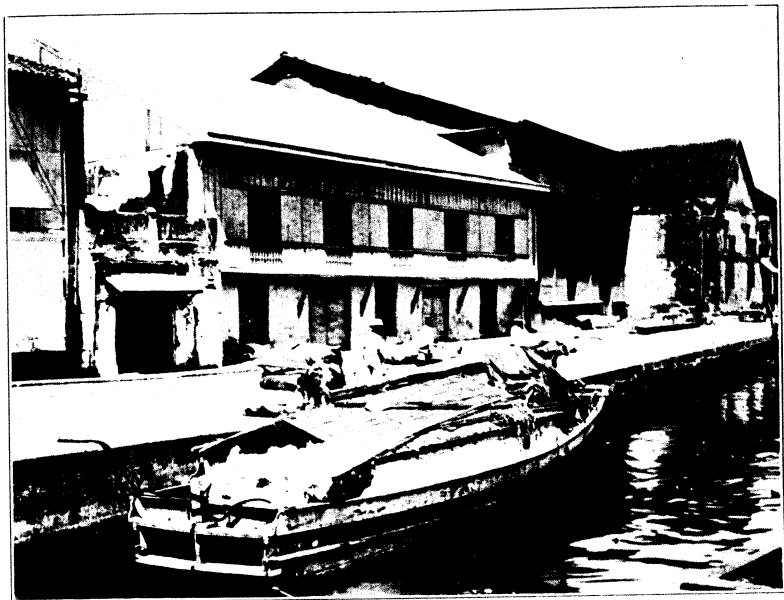
NATIVE VENDERS.



MOSQUITO BRIGADE OILING STAGNANT WATER.



PUMPING KEROSENE INTO SEWERS TO DESTROY MOSQUITO LARVÆ.



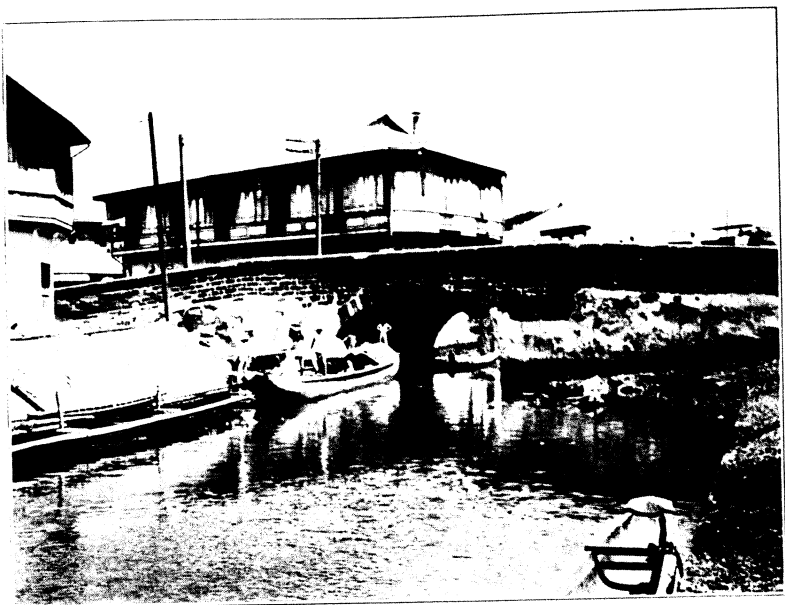
ESTERO DE BINONDO.

Well-built Spanish retaining wall.



ESTERO DE BINONDO.

Note (1) lack of retaining walls, (2) outlet of sewer, (3) commercial importance.
This is in the heart of the business section.



JOLO BRIDGE, ESTERO DE JOLO.

Note commercial importance and lack of satisfactory retaining wall.

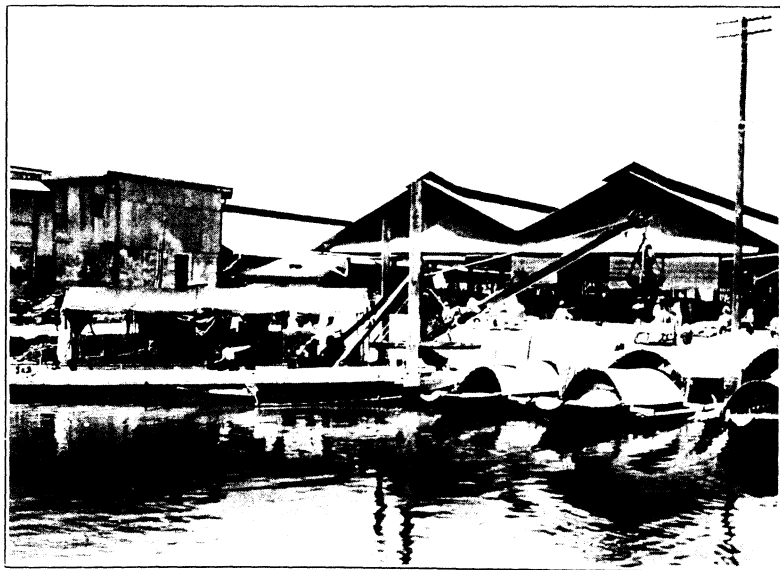


LANDINGS ON PASIG RIVER OPPOSITE ISLA DE CONVALECENCIA.



ESTERO DE QUIAPO.

Entrance to dwelling direct from the estero.



ESTERO ENTRANCE TO THE DIVISORIA MARKET.

Bureau of Navigation dredge at work.

